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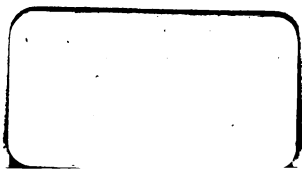
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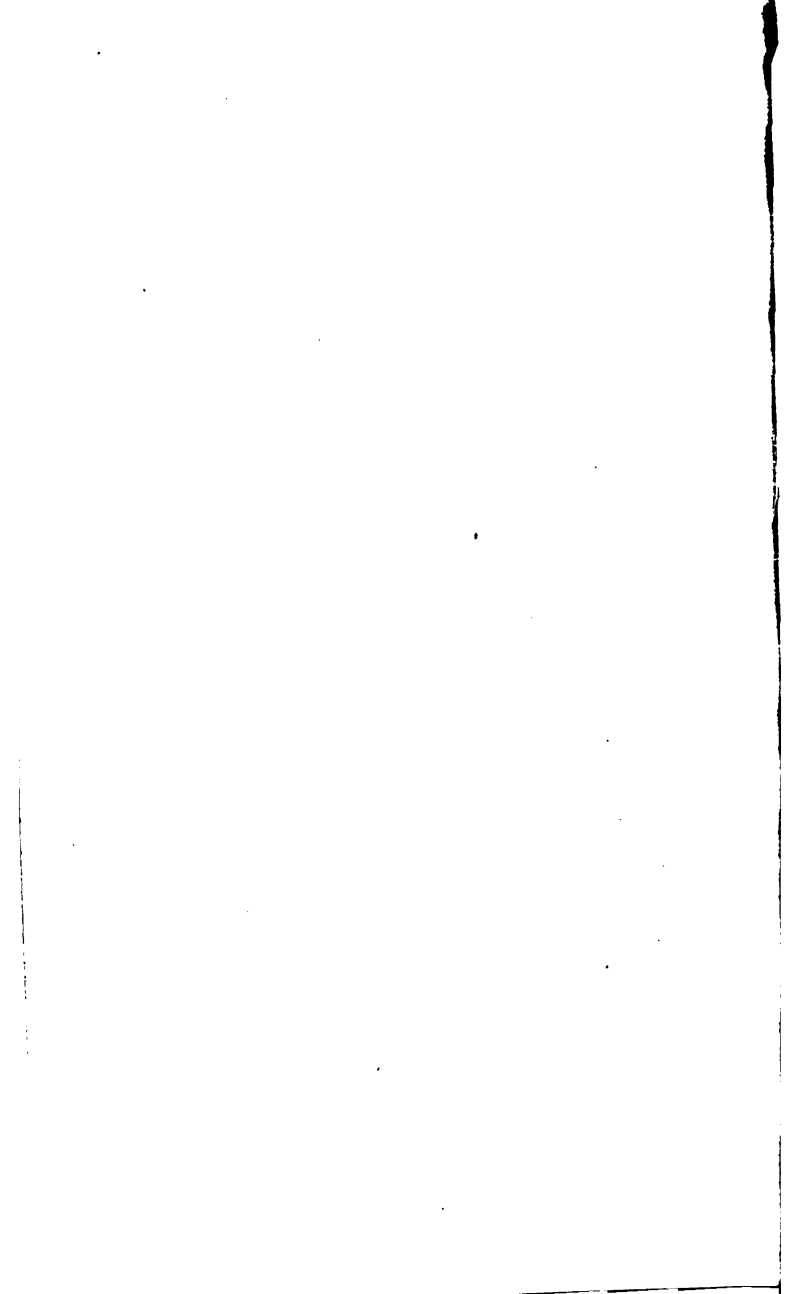
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# HANDLING MEN

**How the Modern Foreman or Manager Wins  
the Cooperation, Upbuilds the Good Will,  
and Promotes the Efficiency of His Workmen**

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**Being the Second Unit  
of a Course in Modern  
Production Methods**

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**BUSINESS TRAINING CORPORATION**  
**NEW YORK** **CHICAGO**

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# Course in Modern Production Methods

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**The text of the Course is issued in six  
units as follows:**

- I. Team Leadership**
  - II. Handling Men**
  - III. Organization**
  - IV. Handling Equipment**
  - V. Production Records**
  - VI. Management**
- 

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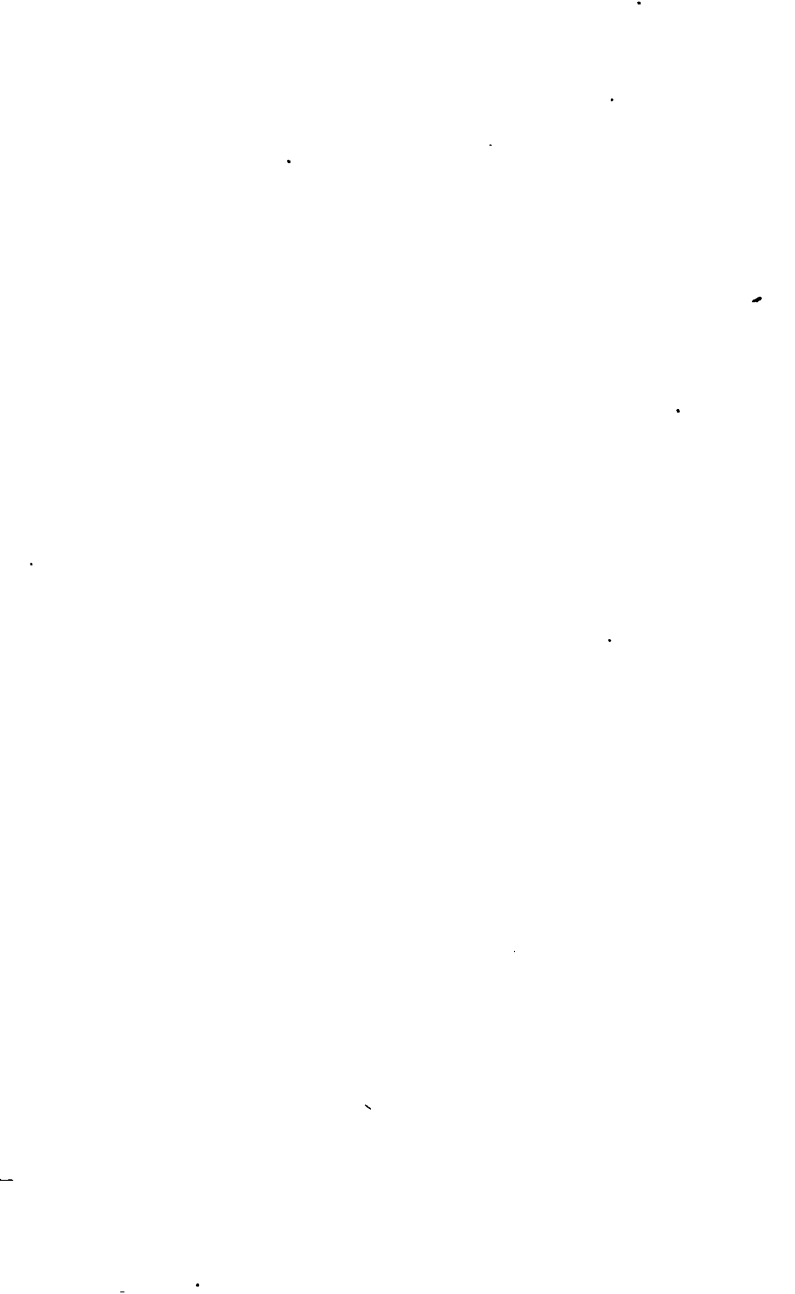
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## P R E F A C E

**T**HIS text is written from the point of view of a foreman, department head, superintendent, or other sub-executive who is in direct contact every day with hand workers.

Other texts in this series will discuss the more complex problems of organizing and directing large forces of men and masses of machinery; but first let us study with some care the methods by which a real leader manages and develops the men placed under his personal charge. For, after all, this is the foundation of all success in production management. Unless the squads and platoons are handled properly, there is no hope of directing a whole regiment of workers with real efficiency. That is the reason why it is so often remarked that "the foreman is the most important man in the plant."



## I

### Developing Ability to Handle Men

**P**ERHAPS of all the men in the operating department of the Ajax Manufacturing Company, Jim Brown was the man who had the most experience, the best general knowledge of the work, and the highest rating for individual production. He had plenty of self-confidence too, and was by no means backward in making his influence felt. Yet, when the superintendent had to pick a foreman to succeed the one who had just left, he didn't select Jim Brown.

This offended Jim's sense of pride as well as his sense of fairness. He felt that that promotion really belonged to him. Moreover, the boys in the shop knew that Jim considered himself in line for the vacancy. So it was a rather bristling Jim Brown who at the close of the working day dropped in at the superintendent's office and made his grievance known.

"Jim," said the superintendent, "you would

have been running that department long ago except for one thing—you are not a diplomat.

*The Good Foreman  
is a Diplomat* You lack tact, and that means you are weak in control. We

can't put a man over other men and get away with it unless he is adjustable to other people and can get along smoothly and harmoniously with workmen. A foreman has to be a diplomat as well as a boss. And he's no good as a boss unless he is a diplomat."

After a pause the superintendent asked:

"How many men are there in your department, Jim?"

"Twenty-seven," came the answer.

"And how many of them are you on friendly terms with?"

Jim hung his head and didn't answer. He was ashamed to tell the superintendent that out of twenty-seven men he could not mention more than four who felt genuinely friendly toward him. The superintendent didn't wait for the answer, for he knew it already.

"Jim," he went on, "you can have that department to run, or another one like it, just as soon as you prove to me that you can get along with men. That's a straight proposition, and it puts the question of your promotion right up to you."

That night Jim talked matters over with his wife. Together they determined to win



the foremanship. That meant acquiring new manners, taking on new habits, and building a new reputation. It was a big job, but Jim had confidence enough in *Going after a Promotion* himself to believe that he could do it. Physically he was strong and healthy, his mind was keen and alert, he was a thorough workman, as well as a loyal one. Moreover, as has been said, he was a master of his trade and knew the organization and operation of his factory as few of the executives of the company did. He believed that he had the stuff out of which a foreman could be made, and he had the will-power to put himself to the task.

First of all, he set out to find what was the matter with himself, instead of trying to figure what was the matter with the other fellows. His wife gave him some valuable pointers here. She told him that he was grouchy in manner, gruff in speech, and that he often made insulting or unpleasant remarks without meaning to say them. He lacked courtesy. He had little sympathy in his make-up. She gave him a complete inventory of his bad qualities, this probably being the first time that she ever had the opportunity to do so safely.

All these bad qualities centered in one weak spot—his lack of Control, his carelessness of

the feelings of others. As far as the other nine traits of the good production man were concerned, Jim had them to a fair degree—some of the qualities, like Energy, Thoroughness, Judgment, and Knowledge being developed to a high level. His problem was to overcome his failing, to develop his weak spot, and thus through the acquirement of tact to strengthen his power of control.

He adopted the policy recommended in the closing chapter of Unit I—the policy of overcoming a weakness through practise and exercise.

*One Man at  
a Time*

Then followed a period of experimental work. Jim tackled one by one the details of the problem of making himself over. Scattering his efforts, he would probably have failed. By concentration he succeeded. He took one man at a time and made a sincere effort to gain the man's good will. He studied carefully the effect of his every word and act upon this man. Inside of a week Jim had made remarkable progress toward converting an enemy into a friend. Inside of a year he had made himself the best-liked man in his department. And a month or two later he got the foremanship.

Until the superintendent pointed out his failing, Jim had never thought of himself as lacking in the ability to handle men. Until then, he had never thought of it as involving

anything more than the "know how" and the authority to give orders. The superintendent's two questions opened his eyes to the all-important fact that the foremanship was not something that one inherited or came to because of trade experience, but that it could be intrusted only to the man who was capable in man-management.

The ability to handle men will advance one in the world of industry today more rapidly than any other quality. A striking comment on the importance of this ability was recently made by Charles H. Sabin when he said:

"The new spirit pervading workers will make it less easy for those not possessing human sympathy and statesmanship to handle workers successfully. Hence there will be larger opportunities and larger rewards for those who demonstrate their fitness to get along well with men. In the olden days a foreman or superintendent or manager who could not get along well with a worker simply fired him, and nobody raised any question. Today the man who cannot handle men without friction is considered unfit for his position and is removed."

*Importance of  
Handling Men*

Mr. Sabin is president of the largest trust company in the United States, and in this position has had wide experience in the financing

of industries. While not an industrial man himself, he speaks from the point of view of a trained observer; and his judgment is borne out by the experience of numerous factory executives who agree that the ability to handle men is essential to a good production leader.

Some people will tell you that the power of leadership cannot be acquired and that a leader of men is born, not made. They might

***Leadership Can  
Be Acquired***

as well say that one cannot become a good musician unless born with an ear for music. As

a matter of fact, many people who do have an ear for music fail to develop into good musicians. They can pick up tunes so easily that they are unwilling to study and practise, and the result is that they are usually outdone by the more ambitious ones who have to work hard to get their skill and who therefore appreciate the value of it.

The war with Germany proved that a man can develop himself to a remarkable degree within a very short space of time if he goes at the task in the right way. At the aviation schools, for example, they would take a young man who had never seen an aeroplane, never drawn a map, never taken a photograph, never fired a machine gun nor sent a wireless message, and within a few months they turned him out an expert flyer who was equally at home

in the air right side up, or upside down, who could do the spiral glide, falling leaf, loop the loop, tail spin or nose spin; who could photograph the enemy's lines, draw maps of what he had seen, send' wireless messages, make a bull's-eye with machine gun fire; and who, if his machine became damaged, knew every part of it so thoroughly that he could repair it if it were repairable.

This young man became an expert flying fighter because his daily thought was to develop one by one those qualities which make the expert in this line. The method is the same method that was followed by Jim in cultivating tact in the factory—the method of practise and experiment. Expertness, ability, leadership—you acquire these faculties through using them.

In the factory you will find that those who have advanced in the art of handling men have not been born with magnetic or hypnotic powers, nor with peculiar gifts of persuasion, but have cultivated this power of leadership by following certain definite principles. In most cases it has taken them a great many years to find out what these principles are, because there have been few books to tell them, and they themselves have not been able to record their experience in words for the benefit of others.

It is often the case that men who follow these principles in developing the art of handling men do so unconsciously, and would laugh if you told them that they followed any rules or laws. But if you analyze their actions, you will see that those of them who are "good managers" follow closely the basic principles.

In the old days, leadership did not count for so much in handling men. The old type of foreman had unlimited authority from the firm to hire and fire as he saw fit, and as a rule had a stock of cuss words and an ability to use them

*The "Driver" Is  
Not a Leader*

that would make a pirate turn green with envy. He wasn't a leader at all, but a



The days of the  
"driver" foreman are  
gone

"driver." While he had one or two favorites who received special treatment, he held nine-tenths of his men through fear and through the fact that jobs were scarce. Put a man of this type into a position of authority today, and the firm would lose its help as quickly as though it had

placed a smallpox patient among them. The days when this kind of a foreman was successful are gone and will never come back.

Another thing that could be noticed about the old time foreman was that he almost always "grew up with the business," or at least had been in the plant a great many years before he was given charge. He had to know every detail of the work better than any man in his gang. Very often he carried around in his head the information that nowadays you find on blue prints or specifications. It was not so hard to do this fifteen or twenty years ago, because work then was much simpler.

Nowadays it is next to impossible for a foreman to know more about every detail of the business than his men know. The business of the modern foreman or superintendent is to make use of *Knowing How to Train Specialists* the knowledge of others. He must know how to make specialists of other men. When he has acquired this art, he will find that he is not confined to one plant but can be successful in many different kinds of plants through applying these same principles.

Being a successful foreman or superintendent today is therefore a business in itself, and when the principles of this business are acquired it is a very profitable one. The difference between being a good average foreman and being a "cracker-jack," means a big difference in the pay envelope. Having one

acquired leadership ability, you are able to use it in whatever business you take up.

One plant superintendent who has made an unusual success of his work, acquired the art of handling men in an automobile factory.

*How One Man Moved Ahead* He had the reputation of turning out large quantities of excellent work at low cost, and of managing his men in such a way as never to have any serious friction or labor trouble. His pay was \$10,000 a year. One day he received an offer from a plant making an entirely different product—altogether outside of the automobile field in which he had made his success. He accepted this offer and applied in the new factory the same principles of handling men and of general management that he had acquired in the automobile field. In less than two years he was earning a salary of \$25,000 and a bonus on top of it.

Take another case. A certain railway shop executive left, and the man who was put in his place had been a salesman for an equipment company. The salesman's knowledge of shop technicalities was only general, but he made a success of the job in an amazingly short time, surprising all but the clear-sighted manager who had selected him. As salesman he had rubbed against all kinds of people and had learned the knack of handling them harmoni-



ously. While he did not know a great deal about railroading, he did know human nature to perfection.

He knew enough to pick out the best men in the shop and to utilize their knowledge and ability, but was always very careful never to pretend that it was his own. He was scrupulously careful to give credit fully and freely, and he had the faculty of getting everybody to pull together, which is the secret of getting out work in any shop or plant of any kind.

When taking a visitor around the shop he would ask Bill or John to show him the new tool which he (Bill or John) had made and would explain how well it had worked, and what it meant to the company to have men like Bill or John who were always taking an interest in the work of the shop. He had every man tied to him with the strongest kind of a bond, and because he surrounded himself with good practical men and took their advice he made a very good executive and the shop was run economically.

Hundreds of similar cases might be cited. They all go to prove two things: first, that it pays to become a top-notch manager of men; and second, that the principles of handling men are the same in different fields of work.

## II

### Sizing-Up the Worker

**A** NECESSARY first step to effective handling of men is correct knowledge of them. Before you can influence a man favorably you must make the right sort of approach to him, and the right approach is based on thoughtful analysis of his personality.

What will appeal to an enthusiastic, over-cheerful, sunny-tempered individual may not go at all with a man of the hard-as-nails type who has little emotion in his make-up.

*Analysing  
Your Men*

An old-timer who is jealous of his place and the experience he has back of him, must be handled differently from the stolid plugger who is interested in his pay envelope and in not much else. Before he tries out any tactics on a man, the successful foreman gives a little thought to the man's personality and mental make-up, as well as to his experience and ability, and the foreman's future dealings with that man are based on this size-up.

This is not the place for a detailed discussion of methods of sizing-up applicants for

employment. That subject is dealt with in Unit III. Our interest here is in the foreman's problem of handling effectively the men who are placed under him, and whose cooperation he must gain if he is to get the results that the management expects from his department. But it is worth while noting briefly the principles that guide the employment manager in sizing-up applicants, for they are the same principles that guide the foreman in sizing-up his men.

"Fitness of the applicant may be considered from two points of view," says S. H. Schlichter, a well-known authority on the subject of employment methods, (1) "fitness for the organization," and (2) "fitness *Attitude and Aptitude* for the job. The first is a question of the applicant's *attitude*, of his character and personality. Fitness for the job, on the other hand, is a question of *aptitude*, of his physical and mental ability to do the work."

It will be helpful to keep these in mind in considering the men whom you are called on to deal with—the two points, *attitude* and *aptitude*. A man's attitude toward industry, toward the plant, toward the management, toward his job, is an index to his character. In fact, it is a sort of reflection or expression of his character. His aptitude for the particular work, on the other hand, is a matter of per-

sonal ability, and is based on his natural bent, his experience, education, and physical condition.

Frequently you can tell a great deal about a man's personality by simply keeping your eyes open and using your brains to reason out what you see. A man's facial expression, his manner of dressing, of carrying himself, of talking, of working, the things he talks about, the intelligence with which he talks—all these are evidences which will guide a keen-witted foreman to the right size-up.

*Judging by Appearances*

"When a fellow comes in who has coarse black hair, a bulging forehead that looks like a misplaced fist, and the belligerent chin of a boxer, I check him up as quarrelsome, hard to adjust, prone to argument, and not pliable," says H. G. Peterman, employment director for the United Cigar Stores. "If an applicant has small eyes set close together, they flash me a warning that he has a low type of intelligence. When a chap fails to look me straight in the eye, I am prejudiced against him at the start. But if he has clear-cut features, a pleasant expression, and a forthright cordial manner, I am prejudiced in favor of him."

An example of judging by appearances, and arriving at a conclusion by a process of elimi-

nation, is given by Fred C. Kelly in his book, "Business, Profits and Human Nature."

"One winter night," says he, "I sat next to a substantial looking old chap and his wife in a theatre. He was a quite humble-appearing fellow, and yet I knew that he had money, because both he and his wife had clothes of excellent quality—even though they were not especially stylish—and his wife wore a good deal of expensive jewelry. Yet the man looked rather ill at ease. From this I judged that he had not always been accustomed to the luxuries of life; theatre-going, I felt sure, was rather new to him. I wondered how he had got his money. Probably not by inheritance, for if it had been in the family for a long time he would have been more used to it. Not by any short-cut get-rich-quick scheme, for he had too honest a face, and he looked like a life-long toiler. Not as a member of any profession, because he was not well enough educated. Not in retail trade of any kind, or he would have been so accustomed to meeting all sorts of people that he would have looked more at ease."

*The Process of  
Elimination*

"I made up my mind that he must be a manufacturer. He was not running an automobile concern, or making any kind of product with a lot of different parts, because that would

mean various departments to his business, and would require probably more executive ability, more capacity for organization, than his face indicated he possessed. Therefore, he must be the manufacturer of some staple product. His business must be one that had grown gradually from a humble beginning, something that would not require an elaborate equipment to start with.

"Between the acts we got to talking, and I found that he was the owner of a prosperous little brick-yard in a Western city."

Of course the foreman does not have to play the part of detective or mental sleuth in finding out essential facts about his men. He can talk with them outright, he can ask them questions. But he will have to adapt his conversation to the type of man he is dealing with, if he is to establish friendly relations, and this calls for some preliminary observation and reasoning such as that used by Mr. Kelly in the case of the unknown brick-maker.

In sizing-up a man you will need some definite list of traits or qualities to look for, applying in a way the method used in your own self-analysis. But it is not necessary

*Seven Traits  
to Look For*

to take into account all of the ten traits on which you tested yourself, for, as explained in Unit I, those are the traits of the industrial executive. What you are in-

terested in now is the *attitude* and *aptitude* of the man who works under you. The qualities to be looked for may be listed under the following heads:

1. Physique
2. Energy
3. Ability to Learn
4. Accuracy
5. Adaptability
6. Knowledge of Work
7. Ambition

These seven qualities affect both attitude and aptitude. That is to say, a man's character and his ability are both determined by his strength or weakness in Physique, Energy, Ability to Learn, Accuracy, Adaptability, Knowledge of Work, and Ambition. Let us look for a few moments at each of these traits.

A man's PHYSIQUE is shown by his appearance. You can also refer to the employment records and get his history, showing physical disabilities, diseases, accidents, and the like (if any) in his record. Your size- *Physique* up of Physique can then be guided by reasoning based on such questions as these, answered by your observation of the man and study of his employment record:

Is he in good health? (Attitude and Aptitude)

Is he physically strong? (Attitude and aptitude)

Is he large or small? (Attitude and Aptitude)

What sort of work is he physically best adapted for? (Aptitude)

Is he of a nervous, emotional type, or the opposite? (Attitude)

Does his physical appearance indicate that his living conditions are good, or the opposite? (Attitude)

ENERGY can be judged by keen observation of a man's methods of working. It is also in-

*Energy* dicated in his manner of talking, though this evidence is not final and should be followed up by watching his actions to see if his energy goes beyond mere words. Physique also affects Energy, and it is fair to expect a man of good physique to be capably energetic; though here again there are exceptions, many persons in ill health being marvels of energy, whereas a well-fed comfortably alive person may be downright lazy. Such questions as the following will aid you in judging how a man stacks up in Energy:

Is he a slow worker or fast? (Attitude and Aptitude)

Does he work by fits and starts, or is he a consistent plugger? (Attitude and Aptitude)

Under an unusual strain, how does he stand up? (Attitude and Aptitude)

Can he work long periods without severe fatigue? (Aptitude)



**ABILITY TO LEARN** is in itself a very real trait of personality, as the observing foreman knows. Some people seem just naturally thick, and others catch on as quick as *Ability to lightning*. It is sometimes the case *Learn* though that the apparently thick-headed are very dependable once they have learned, whereas the quick-to-learn are also quick-to-forget. This is to be kept in mind in judging a man's ability to learn. The foreman ordinarily gets ample opportunity to size-up this quality in his contacts with his workmen, in initiating them to a new machine or instructing them on a new job. He needs only to keep his reasoning power going to get revealing answers to the following questions:

Does he "get" an idea quickly, or must it be explained or demonstrated over and over again? (Aptitude)

Does he remember instructions after turning to a new task? (Aptitude)

Does he make the same mistake twice? (Aptitude)

Is he a careful listener when instructions or explanations are being given? (Attitude and Aptitude)

**ACCURACY** follows naturally on ability to learn. A man may be perfectly able to get instructions quickly and completely, and yet

be so indifferent and careless in his working habits as to fail to carry them out. By observing a man at his work and checking up his results carefully, one should be able to know how he sizes-up on the following questions:

*Accuracy*

Is he a careless worker? (Attitude and Aptitude)

Does he make notes of dimensions, specifications, and other essential details of instructions, or does he try to carry such facts in his head? (Attitude and Aptitude)

Is his percentage of spoiled parts, pieces, material, or product high, low, or just average? (Aptitude)

In answering questions is he careful to give a clear-cut answer, or does he fall back on general statements? (Attitude and Aptitude)

In general conversation does he exaggerate, or does he stick close to facts? (Attitude)

ADAPTABILITY covers a great many qualities of mind and character, but they can all be boiled down to one question. Does he get along well with other people? To answer that question correctly, carefully watch his conduct, his manner, his dealings with his fellow workmen, his dealings with his foreman and those higher up, to see how he fits in with others. The following questions will help.

*Adaptability*

Is he cheerful or gloomy by nature? (Attitude)

Is he quick-tempered or slow to anger? (Attitude)

- Is he a grouch? (Attitude)  
Is he of a suspicious nature? (Attitude)  
Does he warm up to a man on first meeting,  
or is he slow to get acquainted? (Attitude)  
Is he enthusiastic, or dull and unemotional?  
(Attitude)  
Is he a talker, or is he a man of few words?  
(Attitude)  
Is he frivolous or serious-minded? (Attitude)  
Is he fair and open-minded, or is he disposed  
to take advantage and to be influenced by prejudice?  
(Attitude)  
Does he team-up well in the department, or  
hold himself somewhat aloof? (Attitude)  
Is he quick to criticize, or does he fall in with  
your plans and cooperate heartily? (Attitude)  
Is he conceited? Is he humble? Does he  
have or lack self-confidence? (Attitude)

The sixth quality entering into your size-up of the worker is his **KNOWLEDGE OF WORK**. This is almost wholly a matter of aptitude, though it does affect attitude to some *Knowledge* extent. It is clear that the man who *of Work* is ignorant of his job, or who is only a sort of "staller" at it, has a different attitude toward his work and toward the plant than the man who is a competent workman.

Lack of space makes it impossible to include detailed questions on the various lines of work, for they would run into the hundreds. Nor is it necessary to do so, for the foreman will automatically check up on a man's Knowledge of Work as he watches him at machine, bench,

or process, and notes his actual working methods and results. This is the simplest of all the qualities to get accurate impressions of, for a good foreman's first thought is of the ability of his workmen; on that depends the efficiency of his department. In taking on new men, it is a simple thing to test them out on various pieces of work and thus find out by actual experience.

AMBITION is an all-important factor in determining a man's attitude toward his work, his cooperation in the factory team, and the

*Ambition* length of his stay in a particular department. If he is interested in some other kind of employment, and is working only to get a stake or to fill in time, his mental attitude is naturally different from that of a man who is keen about his trade, eager to get ahead in it, and alert to every opportunity. A man's home life, his associations, his education or lack of education, may all be factors affecting his ambition. It is usually not wise to question a man point-blank on these matters, which he considers as mainly of a private nature, but by tactful conversation and by showing a friendly interest, the good foreman can get the information he wants. It will consist of answers to such questions as these:

Does he take pride in his work? (Attitude)  
Does he like this line of work, or is he more

blank rating scale. There are five blank

es he like this line of work, or is he more

interested in some other line? (Attitude and Aptitude)

At what position did he start in industry, and what promotions has he gained? (Attitude and Aptitude)

Is he content with his present job so long as it pays well, or is he looking to something else regardless of the pay? (Attitude and Aptitude)

Is he married or single? (Attitude)

Is he living at home or boarding around? (Attitude)

Does he own his home? Is he paying for a home? (Attitude)

What sort of people does he associate with? (Attitude)

What is his past record on jobs? Is he a job taster? (Attitude and Aptitude)

A good method to follow in sizing-up your men on the seven qualities is to use a rating scale. This method was applied in the Army by superior officers in rating their subordinates, and it was found a good basis for selecting men for promotion. *The Rating Scale*

The advantage of the rating-scale method is that it puts your size-up of a man on a basis of comparison. In judging a man on Physique, for example, you compare him with other men of high, low, and average standing in that quality. Then you have him in a definite rating, and size him up as in Jones' class or in Smith's or in Brown's.

In the folded insert facing this page is a blank rating scale. There are five blanks on

the right labeled "highest," "high," "middle," "low," "lowest." Taking up each trait in turn, try to write in these spaces the men whom the label fits. For example, think over all the men of your acquaintance who are engaged in your line. It is not necessary to keep to your department or plant; but you should keep within your particular trade or field of industry. Which of these men rates highest in Physique? Write his name down in the space opposite "highest" under Physique. Which man do you consider lowest? Put his name in the proper space. In the same way pick out the fellow who is next to highest, the one who is next to lowest, and the one who is just halfway. Write their names in the appropriate spaces.

Do this for each of the seven traits. You will then have a scale in which the various grades under each of the traits is represented by an actual man, somebody whom you can think of in matter-of-fact terms. Jones may rank "highest" under Physique, but in Energy be only "middle," and in Ambition "low." Smith, who is "low" in Physique may rank "high" in Adaptability, and "highest" in Knowledge of Work. And so on. Each grade is represented by a man.

Now you are ready to apply your scale. Suppose there is a new worker, Simpson, who has just been assigned to your department.



How are you to size him up? You can do so by careful observation of him for the first few days, by silently putting to yourself the various questions suggested under each trait in the foregoing pages, *Applying the Scale* and then by assigning him a place in your rating chart by comparing him in each trait with the men already entered there. How does he size up in Physique, for example? Is he able to rank with Jones, in the "highest" rating? No. Then does he belong with Brown, who ranks "high"? If he is not as good as Brown, does he fall into Crosby's "middle" class? Or does he stand with Smith as "low," or with Jordan as "lowest"? You will find it easy to place Simpson in one of these five classes; his rating will not be some indefinite percentage, but in terms of actual personality. He will be as good as Jones, or Brown, or whoever it is that he rates with.

The same methods are followed with each of the other traits, and at the end you have Simpson definitely placed in your mind. In Physique, let us say, he is rated with Brown, in Energy with Crosby, in Ambition with Watt, in Ability to Learn with Jones, in Accuracy with Brown, in Adaptability with Smith, and in Knowledge with Jones. This means a whole lot more to you than if you had put Simpson down as ranking 80 percent in

RATING SCALE	
1. PHYSIQUE HEALTH, APPEARANCE, DRESSING, HABITS. Consider how he impresses you in these respects.	Highest — Jones High — Brown Middle — Crosby Low — Smith Lowest — Jordan
2. ENERGY INITIATIVE, PERSISTENCE, INDUSTRY, ENDURANCE.	Highest — Crosby High — Smith Middle — Jones Low — Brown Lowest — Jordan
3. ABILITY TO LEARN QUICKNESS IN "CATCHING ON," ALERTNESS, MEMORY, OBSER- VATION, REASONING POWER.	Highest — Smith High — Crosby Middle — Jones Low — Jordan Lowest — Brown
4. ACCURACY ATTENTION TO DETAILS, THOROUGHNESS, RELIABILITY, DEPENDABILITY, FREEDOM FROM EXAGGERATION.	Highest — Brown High — Crosby Middle — Jones Low — Smith Lowest — Jordan
5. ADAPTABILITY MANNER, TEMPER, ATTITUDE TOWARD FELLOW WORKERS, ATTITUDE TOWARD MANAGE- MENT, ASSOCIATES.	Highest — Smith High — Crosby Middle — Jordan Low — Brown Lowest — Jones
6. KNOWLEDGE OF WORK WORKING METHODS, EXPERIENCE, WORK RECORDS, SKILL.	Highest — Brown High — Jones Middle — Crosby Low — Smith Lowest — Jordan
7. AMBITION EAGERNESS TO GET AHEAD, PURPOSE, GOAL IN LIFE, INCENTIVE.	Highest — Watt High — Crosby Middle — Smith Low — Jones Lowest — Brown

## A ROTATING SCALE FILLED OUT

This shows the method of making a scale by which you can rate a man in each of the seven qualities

Physique, 75 percent in Energy, and so on with the rest of the traits. If you can think of him in terms of other men, you really have a better picture of him than any percentage figures could possibly give. In Adaptability he ranks with Smith, for example. You know Smith, you know the sort of appeals that he responds to, the motives that move him, the incentives that get him to do his best. By dealing with Simpson as you deal with Smith you will be able more readily to adapt yourself and your methods to him and get his cooperation.

Sizing-up men according to this simple plan is a matter of Observation and good Judgment, but it calls into play also the traits of Fairness, Control, Resourcefulness, and Knowledge. You must be *fair* *Traits Called for* in your appraisals of men, and *in Sizing-Up Men* permit no prejudices to sway you; you must keep under *control*, be tactful, sympathetic and understanding in dealing with them, if you would get the information you seek; you must be *resourceful* in seeking the information you require; and finally you must exercise your own *knowledge* to weigh the evidence, to make your judgment intelligent and unbiased, and to make the most effective use of the results of your size-up.

For the size-up is only a preliminary step in

handling men. It simply prepares the way for the policy of management and leadership which you are to adopt, and which is based on the results of your size-up.

### III

## Handling Men Through Personality

**V**ARIOUS methods of handling men will be described and illustrated in this text.

Succeeding chapters will show how they may be controlled through organization and discipline, through suggestion and emotion, through the pocketbook, and through other means. But underlying all these methods there is the direct, simple method of man-to-man contact and influence; that is to say, the method of handling men through personality.

Unless a man has at least a fair share of the ten traits of industrial leadership set forth in Unit I, he cannot hope to be successful even in running a small squad of men. You have already tested yourself and know pretty well how you "stack up" in respect to these traits. Whether you have given yourself a high or a low rating, you will be interested now in a brief study of the manner in which you can utilize these traits to influence effectively the men under you. At the same time, you will find such exercise of your traits of direct service in developing them as indicated in the final chapter of Unit I.

The best workmen do not always make the best foremen and executives. Sometimes there is criticism among workers because one

*Good Workmen Not  
Always Good Foremen*

of their number, who was not the best workman, was promoted instead of the

most skilled man. Such criticisms do not take into account the fact that the foreman is not a workman but an executive; that it is his ability to guide others, rather than to do the work himself, which makes him valuable as a foreman.

The first essential of an AI foreman is an appreciation of the other man's problems, ability to see both sides of a question, and a firm determination to be absolutely fair to all concerned. The square deal and no favoritism is a necessary foundation for successful foremanship.

As was indicated in discussing Control, it is of the first importance for a leader in any field to have ample confidence in himself. If he

*Self-Confidence  
is Essential*

lacks confidence in himself, how can he expect to command the confidence, respect, and cooperation

of others? Self-confidence is absolutely an essential.

It is true that self-confidence and real ability do not always go together. And sometimes the possession of a large amount of self-

confidence without much ability will advance a man for a time, as you have noticed in the cases of quite a number of four-flushers who, on a bluff, "got away with it" for a considerable length of time. Such men, however, never last at this game, but are forced to go from shop to shop and from city to city as their bluff is uncovered.

You can cultivate self-confidence—and so exercise and at the same time strengthen Control—by the "experimental method." It is largely a matter of forming the right habits. Suppose there is in the shop some man who generally gets the best of you, and of whom you stand in more or less awe. All right, select him as your subject for experimentation. It will be your job inside of six months to have this man "eating out of your hand."

First make a close study of him. You think you know him but you really don't. Analyze him. Size him up and give him a rating in accordance with the methods explained in Chapter II. *Cultivating Habits of Self-Confidence*  
Watch him closely for strong and weak points, and note them down as you find them. In order to do this, do not avoid him but rather cultivate his society and engage him frequently in conversation. You will be surprised after a few weeks of looking for these weak points to find that the man in ques-

tion has quite a number of them. This discovery itself will increase your self-confidence with respect to him. But that is not enough. After you have located the points wherein he is weak—perhaps in Accuracy, or Adaptability, or Knowledge—sort them out and select those on which you are correspondingly strong. This is where you are going to tackle him, and in doing it in this way you are going about it scientifically just as the man who aspires to be heavyweight champion studies the weak points of his adversary and his own strong points, and plans the campaign accordingly.

After you have sized-up both him and yourself sufficiently in this way, in your dealings with him lead up whenever possible to the things in which you can best him. When both of you are in conversation with others, lead the talk to those matters in which you are an authority and on which he is not. If you will systematically keep up these tactics for a month or two, instead of standing in awe of this man, you will soon find that you have forgotten that feeling altogether or even have put the shoe on the other foot.

Try in a systematic way, also, to overcome any "fear" which you may have of those in authority. Respect is a healthy feeling, but



fear is not—for an American. Don't let yourself dodge the visits of the superintendent, if you are a foreman, for fear that he may ask embarrassing questions. If *Overcoming Timidity* he is wide-awake and on to his job, it will not take him long to get next to your game.

Get the habit of welcoming responsibility. At the start this is done by looking for the hard jobs that others avoid. Any man who really gets in the habit of "eating up" work that others like to shirk, is going to find it easy to climb the ladder of success.

Shop life is full of unexpected happenings, some of them real emergencies, when a leader of men is called upon to make a quick decision and act at once. The only way to get this ability is to cultivate the power of making accurate decisions. Like all the other necessary qualities, it can be cultivated systematically.

The majority of men go through life taking most things for granted. If they have an opinion on any subject it is because they have read it in the paper or have *Developing Judgment* heard someone else hand it out. When you face a man of this kind with a situation that he has not met before, he is at a loss in making up his mind what to do. When he does act, if at all, it is mostly the result of a guess and is as likely to be the wrong move as the right one.

*The ability to make quick and accurate decisions in emergencies is gained through the habit of making accurate decisions about less important matters. There is no short cut in this matter.*

At the beginning, get the idea into your head that you are going to know the reason for what you do. When a man says that such and such a way is the best way to do certain work, do not accept this statement offhand without thought. If he is in authority over you, you will have to do it that way, of course, and should do so cheerfully; but at the same time you need not accept this in your own mind as the best and only way. Reason it out for yourself. If you come to the conclusion that you have a better way to do it, use tact and try to "sell" him the idea of doing it your way. If you can show him that it is really better than his way, and if he is a real executive, he will not only adopt your way but will mark you down as a man worth keeping his eyes on.

Get the habit of asking yourself "why."

This is the word that nature puts most often into the child's mouth, for the very good reason that one learns more quickly through asking it than in any other way. The trouble with most people is that they stop asking this question after they

*Keep Up the  
"Why" Habit*

are nine or ten years old. If everyone kept up the "why" habit into maturity, there would be a lot more reasoning ability than there is now.

If you are a foreman or department head, ask yourself this little question frequently.

You are running your department in a good many ways just as the foreman did who preceded you. Why? You have a certain man doing a certain kind of work.



"Why" is a good key to use

Why? You are paying Jones 10 cents an hour more than Smith. Why? You have got into certain habits of going about your work. Why? You are satisfied with the production from a certain machine or man. Why? Don't wait for the superintendent or manager to ask you these questions. That is the keynote to keeping one step ahead of the boss and two steps ahead of your men.

After a few months of this kind of cross questioning you will find that your reasoning powers are developing in a very gratifying way, and that people who have never done so before will begin to ask your opin-

ion on questions. More than this, you will find that when the sudden emergency arises your mind will be trained in such a way that it will solve the problem quickly. The man who cultivates the habit of asking himself "why," is the last one to get rattled.

The exercise of tact—a vital element of Control—is a strong factor in influencing men through personality. There are no set rules

*Developing Tact* for being tactful. With one man it means coming out strongly with a positive statement, while in dealing with another it means making suggestions and letting him think that the idea you are trying to give comes from him. The most practical rule is to take one man at a time and to *make a careful study of that man*. That is the whole thing in a nutshell—the study of human nature. You have to see what you are aiming at before you can shoot; and you have to know the strong and weak points of the man you are dealing with before you can determine the easiest and surest way to influence him.

Someone may say, Pshaw! It isn't necessary to go to all of that trouble to handle men, when you are in authority over them and have the backing of the company. The man who says that is dead wrong. Nobody gets very far in this world on somebody else's authority. Pick out the foremen and super-

intendents who have made the most marked success, and whose departments are far ahead of the average, and you will find that it is the influence of this foreman or superintendent himself, far more than the influence of the company back of him, which has enabled him to obtain these results. In fact, you will find that those who are not directly under this man go to him for advice and that he has great influence outside of his own department.

A man of this type is successful because he knows men, and in order to know them he has had to study them. Knowing men is more than merely being acquainted with them. It means knowing just how they think and how they will react to any statement or suggestion. It means knowing them as the result of careful observation and good judgment employed along the lines of a systematic size-up as explained in Chapter II.

By the exercise of Fairness—and it includes both sympathy and understanding as well as justice—you can work wonders with the men. They will respond to it with loyalty and good work.

Make it a point to stand up for others when they are in the right. Loyalty works both ways. If you are foreman of a gang, you must be loyal to those under you as well as those over you. If you are not, it will not take your

men long to "get your number"—and with them it will be a very small number indeed.

*How Fairness  
Enters in*

Furthermore, any company management that is worthwhile wants the foreman to exercise justice toward the men. Too many firms have got a bad reputation as oppressors and as unjust, simply because of some bullying foreman who was really too cowardly to take issue with the management when his men were in the right.

Then again, if you are a foreman or superintendent, the development of loyalty in your men will be a big part of your job. You will have to study every means to impart this feeling to them. Be on the watch to uncover any feelings of injustice among them, and to correct this feeling immediately. Many foremen overlook this point until it is too late.

Remember, above all, that a foreman cannot develop fairness in others unless he has it himself.

One of the prime essentials of leadership is knowledge. "The man who knows" is the man who can most surely command respect. The ambitious production man is always on the lookout to keep himself informed on the latest developments of his trade; and the more up-to-date he is in this respect, the more valuable he becomes.

Make it a point to take the leading trade

paper or journal of your industry, and to go over it carefully every time it is received. You may not have time to read every word of each issue, but *Broadening Yourself* you should make quite sure that you miss nothing that is really important. Apply your reasoning power to each suggestion that you receive from such sources, and do not accept them as best for your purposes simply because you see them in print.

By such reading you will keep well posted as to what the other fellow in the same line of business is doing and will be able to compare yourself and your methods with those of other plants turning out the same kind of work.

If there is a public library in your town, do not overlook the fact that there may be good books on your work which it will pay you to read. In this way you get the benefit of the experience of others. Life is too short for any man to learn altogether by his own experience. By cultivating your reasoning power and judgment you can make use of the experience of a great many others, and advance yourself much more quickly by so doing than if you neglect to use their help.

## IV

### Handling Men Through Self-Interest

**T**HE ideal foreman or superintendent is the one who has the least occasion to "show his authority." We all know the type of boss who struts through the shop with his chest thrown out ordering everybody around in a loud voice and making it a point to be dissatisfied with everything. No one respects a man of this type, and the men under him know that such a man is the easiest kind to fool. When his back is turned, his orders are at once forgotten.

The efficient foreman does not need to parade through his department like a general reviewing his troops. He goes about quietly.

***Bull-Dozing Requires  
No Skill***

When he speaks it is not in an especially loud or commanding way, nor with threats or abuse. The efficient foreman never makes the mistake of *threatening to fire* a man. When a foreman does this he admits that he is a failure in getting results from that man by other means which require real ability in management. He is compelled to retreat to



the threat to discharge, which requires no ability and is simply a manifestation of the authority of the firm.

In place of loud talk or a display of force, the efficient industrial executive—the one who has developed his personality along the lines described in the preceding chapter—skilfully and shrewdly plays upon the self-interest of his men. He studies the chief desires and motives of each one. He takes pains to appeal to these motives and thus to lead them, instead of trying always to drive them.

Notwithstanding the fact that this efficient executive goes about so quietly, without fuss and feathers, you will find that his directions are followed even when his back is turned, for his men know that he is on to his job and respect him.

Respect is one of the most important factors in leadership. You cannot force it upon your men. It must gradually grow up in their minds. It comes, however, very largely through your own pos- *Cultivating Respect*  
session of Thoroughness, Judgment, Fairness, Control and the other traits of a successful industrial executive. At the same time there are certain rules to be observed in securing respect, aside from the cultivation of these ten traits, which should be kept in mind and made a habit.

One of the rules of tact is to cultivate a smile. Do not, however, carry this so far as



The circus is the place for the incurable joker

to get the reputation of being a "joker." The man who does this has tied himself hand and foot so far as making progress as an executive is concerned. A laugh *with* "the boys" once in a while is a healthy stimulant, but when they get the habit of laughing *at* you it is all off, and you had better move into the next

town or get a job as clown in the circus.

You will often hear men speak of a certain foreman as "meaning what he says." Sincerity is just that—meaning what you say.

*The Value of  
Frankness and  
Sincerity*

When the men in your department have this opinion of you, it goes a long way toward your success in handling them. You must cultivate this opinion of yourself.

Never make a statement of which you are not sure, either regarding the business of your department or anything else, if you wish to have the confidence of your men. You cannot afford to get the reputation of bluffing, even in little matters. Nothing will "queer" a foreman or superintendent more quickly

than to have the boys take his words "with a grain of salt."

You must hold yourself somewhat apart from those under you, even after hours when shop discipline is forgotten. The long-headed foreman will avoid associating, as a matter of habit, with members of his department. Associate with your brother foremen, or with others who are not connected with the shop, but don't hang out with the boys. This is necessary in order to avoid familiarity. It is the same wise rule that applies in the army where the officers are strictly forbidden to mix too freely with the men. *Don't Hang Out with the Boys*

When John Billings got promoted to a foremanship, one of his hardest tasks was to overcome the sense of familiarity that came from many years' association on an equal basis with the men under him. John felt that to hold aloof from them now that he was a foreman would be to show a narrow-minded and mean spirit. Yet he soon found out that he couldn't go to Sam Short's house for a good time in the evening, and then "jack up" Sam the next day for some failing in work. He would make the attempt, and go through the motions, but somehow or other it did not "take." It was as though Sam were saying to himself, "I know

John has to do this, as a matter of business, but he can't really mean it."

It is not narrow-mindedness, nor a case of swelled head, but good sound business judgment, which causes the newly-made foreman to seek gradually a new circle of acquaintances for leisure hours. Watch successful men in your shop or other lines of business and you will soon see that they practise this necessary principle.

On the other hand, the really big man does not spend his time in trying to assume a false dignity and reserve. If the natural character-

*But Maintain  
Real Democracy*      istics of a man do not command respect, no forced attempt to maintain dignity will do so.

The big manager tries to get away from feeling and from speaking of the employees as "his" men and to say "our" men. In the same way he encourages the feeling that it is "our" shop in everyone from the office boy up. He avoids the use of the personal pronoun "I" or the possessive "mine." It is only the small caliber men who try to assume ownership over their subordinates.

It is a grave mistake to attempt to show one's great importance. The only men who are impressed by it are those who use flattery as a means to secure favors, and these are the most dangerous kind of followers to have.

The wise manager or foreman treats all men as nearly alike as circumstances permit and avoids favoritism as he would a pestilence.

Two examples of the democracy which characterizes successful managers are given in the cases of Charles Schwab and Sir Charles Ross. The former has forged his way up from a day worker; the latter is the descendant of a long line of Scottish ancestry. Yet both succeed by being accessible at all reasonable times. They keep in close touch with their men and their problems and have almost no difficulties. Both are proud of their relations with their men.

How much a manager can mingle freely with his working force depends largely upon the personality of the manager himself. The bigger the man the more he can mingle and keep the respect of his men. General Foch is reported to have carried the pack of a tired Italian soldier and been caught in the act by officials of both armies, without losing his self-possession or the respect of anyone. Furthermore, he continued carrying the pack.

In Chapter V we shall see how the appeal to a man through his pocketbook—*Appealing to Pride* in other words, through the payroll—can be made a very effective one.

Before you can appeal on these lines to some men, however, you must arouse their pride.

You must jar them out of the rut. Pride can also be used effectively with some men in whom the incentive of a raise of pay does not take hold.

John Billings had a case of this kind in Tony Schwartz. Tony was contented to plod along at the same gait day after day, and year after year. Tony was the "hard case" for John to handle in getting his department up where it would make a showing. Suggesting to Tony that he could make use of more money—which would naturally follow more work turned out—did not make the least impression, and John knew that even the fear of losing his job would not cause the man to turn over a new leaf. Tony was in a rut.

One day a beautiful new machine was received in John's department. It was of the same type that Tony and several others in this department operated. All of them asked for the new machine—all except Tony.

When the machine was set up and belted, John called Tony aside. "Tony," he said, "I am going to put you on this machine. Whether you stay on it, or go back to your old one, will depend altogether on yourself."

The first day, Tony went at things with the same old gait. The second and third day did not seem to make much difference. John made a practise of keeping in the vicinity of this

machine a good part of the time so that Tony would know he was keeping an eye on him. At various times when John was not near the machine, one or another of the boys would come over and look at it with envious eyes and tell Tony what he thought of an old slouch like him getting the best in the shop.

The fourth day Tony seemed to go at things in a new way. He was apparently determined to show these fellows that there had been no mistake in picking him for the best machine. He ran second in the department in production that day, and asked John's advice about a new way to handle the work that would save a couple of minutes on each piece—something he had never done before.

To make a long story short, Tony kept the new machine. His pride was aroused, as well as his spirit of rivalry, and it made a different man of him.

The efficient executive will study means of arousing pride, and will apply them where the thoughtless, non-progressive man would never think of doing so. He will study the different members of his department closely regarding their home life, for example. One man has a wife who furnishes the incentive for keeping him at top notch—another is paying for a home—another is putting his boys through school. All of these things are taken

into account by the progressive foreman and utilized in stimulating greater and steadier effort.

Most youngsters who go into a shop have a certain amount of ambition. Too often this is ground out of them through poor methods

*Appealing to  
Ambition*

of handling and lack of leadership on the part of those in authority.

Nothing will kill ambition in a man quicker than the belief that he will stay where he is, regardless of what he does.

One effective way to arouse ambition throughout your department, is to let the boys know that extra effort is sure to be rewarded. You must keep your eyes open for chances to advance men in work and wages, instead of getting the idea that it is good foremanship and management to hold them down. Try the experiment of doing this in one or two cases and observe the effect on the rest of the men.

A new foreman often encounters a "dead" gang, for the reason that the poor qualities of the preceding foreman, which made it necessary to change, have killed all initiative among the men. The first job of the new man will be to wake this gang up. The way to do this is to pick out one or two of the most likely cases and work on them with the object of providing examples for the rest.



Some of the most successful industrial managers have made big hits through making use of the natural spirit of competition which pervades all bodies of men. Every man at heart likes to see his own team win the ball game, his own countrymen win battles, and his own department win a name as the star department of the shop. You can make effective use of this spirit in your department.

*Appealing to  
Rivalry*

Production records should not be kept a secret among the officials of the company, but should be posted so that all of the men can see them, and can see what individual or department is in the lead. In connection with this, some form of rewarding those who maintain the lead should be installed, so as to back up the spirit of competition with definite financial gain.

Keep in mind that the same spirit of competition which is displayed in the three-legged race and the broad jump on the part of your men at the annual shop picnic, should be introduced into their daily work.

Sometimes it is necessary to rearrange departments to get this effect. Two separate gangs doing the same kind of work lend themselves better to this use of rivalry than one big gang without any means of competition. Sometimes the nationalities of the men can

be taken into account in such matters, providing the foreman can prevent such competition developing into hard feeling and open "scraps." Here is where tact comes into play.

Pride of workmanship is closely related to rivalry, but it has an additional advantage in that it can frequently be utilized in individual cases, where there is little opportunity to make use of competition. The best way of making this appeal is often what may be called the indirect method.

*Utilizing Pride  
of Workmanship*

John Billings made use of the indirect method in the case of Henry Rowland. Henry had the makings of a first-class workman, but was indifferent and slipshod. He was also of a stubborn disposition, so that any direct approach was likely to set him all the harder in his way of thinking and doing. John never said anything to Henry about improving on his work, but made it a practise to refer frequently to what a good man Joe Sykes was, or how well Gene Collins handled the same job. After a while Henry grew tired of hearing so many good things about the other fellows who did the same work, and made up his mind to show the boss that they were not "the whole cheese" after all.

The indirect method is not confined to this

one motive, but can be applied equally well to most of the others. It is well for every executive to make use of this method and to train himself in applying it, for it is a valuable tool in handling men.

Go back over each of the headings of this chapter, and make it a point to experiment a little on your men, where you are convinced that you can thereby get better results. Remember that only practise makes perfect, in foremanship as well as anything else, and that you must take pains to perfect yourself in these different methods which form the tools of an efficient foreman or superintendent.

## V

### Handling Men Through Organization

**J**OHAN D. RYAN, of the Amalgamated Copper Company, and during the war in charge of aircraft production for the United States Army, is a great believer in averages. He has built up his success in business by strictly observing this law in handling men. He believes that a hundred men will average up pretty well with any other group of the same number picked at random anywhere else. In each such group you will find some very good men, some very poor ones, and a large number of average ones.

Mr. Ryan has built up a great many run-down organizations, simply by changing men around until he has each one fitted into his

proper place. He does not believe in firing the whole gang and getting a new one, because

*Fitting Men into  
the Right Places*

the new gang on the average is not likely to be any better than the old one. And this is sound philosophy.

Even though you are the head of a department in a plant where there is a definite sys-

tem of hiring help, under an employment manager, *you* are the man who will have to play the checkers to win after the employment manager hands them over to you. The employment manager will make sure that the man that you get is reasonably healthy, that his record has been good, or at least not bad, that he apparently is the man that you need in your department. That is as far as any employment manager can or should go. Whatever real use is to be made of employees is strictly up to the department head.

Perhaps one man whom you have got on a certain job, while as good at this as you expected anyone to be, has special ability for one of the other jobs in your department. Perhaps shifting him to this work would cause him to break all previous records. Of course you do not know this and perhaps he does not either. How shall you go about finding out?

The answer is that you must be constantly trying out your men for unexpected and unlooked-for abilities, one man at a time of course—for if you experimented on too many of them at once you would upset the work of the department.

Write down the names of the men in your department and put after each name what that man is doing and what you believe he is best

qualified to do. Then in each case determine to make him prove it! In other words, you

*Try the Men Out* have no right to assume that Bill Jones is best fitted for such-and-such a job or operation unless you have tried a number of experiments on Bill to find out.

The success of any football team or rowing crew is largely due to the fact that the line-up for the final game is entirely different from that at the beginning of the season. The coach has worked and studied to get each man where his ability will count for the most.

If your department is lined up today in the same way that it was six months ago, there is probably something the matter with the department, and something the matter with you also.

Perhaps the best way to go about making these experiments in playing the checkers, is to take first the jobs that you consider to be "poor" or which make the least profit for the firm. A manager's ability is most clearly demonstrated when he can take a tail-end ball team and push it ahead into the pennant-winning class. A foreman's ability is most strikingly demonstrated to his firm when he can take a profitless job and make it one of the best in the shop.

Pick out one of the profitless jobs in your

organization, and, as the first step, analyze it. Does the nature of the work make it most important that the man doing the work have

Strength  
Quickness  
Skill in trade  
Patience  
Endurance  
Good eyesight  
Accuracy  
Judgment

or any other particular qualities? Remember that each job, if it is to be done *best*, calls for some such list of requirements.

Next arrange these qualities in the order that you consider most important for this work. In one case, for example, strength will head the list and quickness come last; another will call for quick- *Analyse the Job* ness first and accuracy last. And so on. After you have arranged this list, it will be a *requirements list* for that particular job.

Many foremen have let professional systematizers come into their departments and show them up, simply because they had neglected to use this simple analysis scheme in connection with the work of their men. The systematizer, by applying such methods, was able to suggest certain improvements at once.

Your analysis of the job and the man, therefore, and the comparison of these analyses after they are made, will go a long way toward showing you whether the right or the wrong man is on each job or operation under your control.

The next step is to analyze every man in your department with respect to his possession of these qualities. Pick out the man whose qualities come nearest to matching the requirements list for a particular job. He is the man who should be tried out on that job, unless you have made a mistake in your analysis, which is quite possible, especially at first.

You are really master of your department only after you thoroughly understand every man and every job in it; and to understand these things thoroughly it is not enough to have a general knowledge of them, such as the average foreman has, but a detailed knowledge such as can be gained only through close analysis.

When you have mastered the art of doing this, you will surprise and please the employment manager by calling for men with certain specific qualities, expressed as in the example just given, instead of calling for very general qualities, as is now probably the case. Also,

*Drawing up  
Specifications  
for Men*



if you are hiring your own men, you will be able to pick them much better than you did before.

After you have got all of the "poor" jobs in your department on a profitable basis, either by shifting men around or by finding better ways of doing the work, do not be content with this result but take some of the profitable jobs with the idea of improving them in the same way. Remember that no job has reached perfection, or at least we of the present day haven't found it. Your department will never be in such shape that there is nothing in it that can be improved. In fact, long before this time comes the chances are that you will have advanced into the position of superintendent or manager if you constantly apply the methods set forth in this Unit with energy and good sense.

The analysis of work with respect to the human qualities needed to perform it will be a life-saver for you when faced by labor shortage, and when compelled to break in green men or take on women and girls in place of men. When you find that a certain job or operation calls for qualities that are not obtainable, you will have to break up the job or operations into more operations needing

*Meeting Labor Shortage  
with the Help of  
Analysis*

less of these qualities. For example, numerous women were employed during the World War on work that strong men were required to do formerly; this was made possible by putting in lifting apparatus and other devices to make machinery take the place of muscle. Careful job-analysis enables the management to tackle jobs in which skill has always been considered essential and put unskilled people at work on them, by having the skill furnished by one man who sets up and looks after several machines.

This system of analyzing your help will not only enable you to place them more intelligently, but will in addition give you a much better idea of their relative values to the company. It is a sure way to reveal the dead wood.

No one is perfect, and it is unlikely that any analysis will show a perfect combination of qualities for any one job. Part of the duties of a modern foreman or superintendent is to build up his human organization just as he would go about strengthening the weak part of a machine or adding attachments to increase its worth. So you must keep in mind the task of developing in those under you necessary qualities which seem lacking or not sufficiently developed. In Chapter X special attention is given to this subject.

Is there any standard way of giving an order? This question has frequently been asked. In answer it may be said while the details of giving an order may vary according to the type of labor you are dealing with, there are some conditions that ought to be observed in every case. These may be summed up in the three rules: *How to Give an Order*

1. Make sure that the order is perfectly clear and that it is understood.
2. Make sure that it is not given in a tone or manner that will cause resentment.
3. Make sure that it is carried out as you have given it.

This is the whole science of the matter of giving orders and can be adapted to the particular requirements of every case. The main point is to remember that what you are really giving is in the nature of instructions, rather than of asserting authority.

A few words should be said at this point on the subject of getting rid of men who are incompetent or lazy or insolent, or for some other reason cannot handle any of the jobs in your department.

The rule given at the beginning of the preceding chapter, "never threaten to discharge a man," of course does not mean never to discharge one. There are cases which arise in

every shop and in every department when this is the only course to take.

If you cannot get results from a man by using any of the other methods or appeals it is time to discharge him, providing he is not

*How to Discharge a Man* a square peg in a round hole who would make good in some other department. A man should not

be discharged until you have thought the matter over carefully and made up your mind that it is the only thing to do. When this happens, it should be done without allowing yourself to be drawn into an argument with the man. Whatever he has to say at such a time will make no difference if the case has been carefully enough considered by you in advance. Argument is not only a waste of time, but gives a bad impression to the others in the department.

Sometimes a foreman gets the reputation of being afraid to fire anyone. This is a bad thing, and will upset discipline anywhere. Make it plain that such is not the case with you, and equally plain that you never discharge a man without full and just cause. This is the whole science in the matter of discharging.

In many well-managed concerns the control over both "hiring and firing," as the succeeding Unit will show, has been taken out of

the hands of foremen and superintendents and intrusted solely to the Employment or Personnel Department. Even in this case, however, the foreman may always obtain a man's removal from his department.

One of your most important duties as a foreman, or in any other position of responsibility in charge of men, will be to choose and train a second man or assistant. You should do this whether called upon *Training a Real Assistant* by the firm to do so or not. A good organization is never complete until it will run smoothly no matter who drops out. Many men are afraid to have a good man as assistant for fear he may get their job. That is a mistake.

Whether it appears to be so or not, you can put it down as a fact that there is always a better job waiting for you, *after you have perfected your organization*. Naturally, you will not step from one job into another without having done good work in the one that you now occupy. But assuming that you have improved the work in this department, that you have studied the jobs and the men, and have placed the men where they belong, that you have secured good discipline, increased production and reduced costs, there is only one thing more for you to do to perfect your organization, and that is to train your successor.

In picking him out, go over the qualities of leadership set forth in Unit I, and apply the percentage tests to him as you did to yourself. Don't take a poor man on the ground that he will not take your job away from you, but pick the best man you can get, on the ground that he will be able to swing your job after you have trained him and will thereby enable you to take something better. Many of the bigger concerns make it a rule not to promote a man until he has shown the executive ability needed to so arrange his department that it will run without him.

Do not worry about the chance of losing a good job by doing this. There is always a better job somewhere for the man who has ability enough and broad-mindedness enough to handle it.

## VI

### Handling Men Through the Pocketbook

**P**ERHAPS the chief incentive to be held out to the workman is the appeal through the pocketbook. Every man who aspires to handle other men, or who is already handling them and wishes to increase his efficiency, must thoroughly understand how to apply this appeal. For there are right and wrong ways to use it.

You can call to mind, no doubt, examples within your own experience which are like those in the case of Jones and Smith—brother foremen in the works of the Climax Manufacturing Company. Jones knew his business (as far as the trade end of it was concerned) better than Smith, and paid his men, on the average, more money. Yet Smith turned out a greater output at a lower cost. And they were equally strict in the matter of discipline.

A case of this kind seems to contradict the statement that the pocketbook makes the strongest kind of an appeal. But let us look into it a little deeper.

Jones had the reputation of never recommending a man for a raise unless the man had threatened to quit. As a result, those in his gang who had received the most wages were the ones who had played the "going to quit if I don't get it" game for all it was worth. Some much better fellows who didn't care to play this game were getting less than these bluffers, while deserving more. In other words, Jones's payroll was full of unfairness.

Smith, on the other hand, while his rates were lower, made it a point to make every raise count. He found that when you wait

*Making a Payroll Fair* until a man forces a raise out of you, a 10-cent per hour increase does not make him feel nearly so happy as a 5-cent increase given without asking. Smith also had learned by experience that you can't pay a 50-cent man 70 cents, and an 80-cent man 70 cents, and get best results out of either of them. In other words, he had learned to cut the unfairness out of his payroll.

The foreman who is really alive to his job will know when one of his men is due for a raise before the man himself knows it. He will keep himself informed, and have a record in his little book of the rate of pay of each man in his department, when the man was last raised and how much the increase



amounted to. In that same little book he will have notes which will tell him whether that same man's production stayed the same after getting the raise, or increased.

The foregoing remarks apply, of course, to the system known as daywork. But there are other methods of fixing the compensation of workers. Let us take a look at the various well-known wage systems and see how they size-up as tools in management.

Daywork is the oldest system of pay. In many ways it is the best. People are beginning to find this out, although for several years daywork was considered to be behind the times as compared *Daywork Pay* with the "scientific" systems of more recent invention.

Henry Ford uses the daywork system, and no one can say that he does not get production out of his plants. He knows what a day's work should be, pays his men good wages, and insists that they do a day's work or go elsewhere.

The secret of successful daywork lies in knowing what a day's work should be, and getting it by paying what a day's work is worth. When you do this you have done all that can be done under any system, however scientific. The foreman who works under the daywork system must go over the production

records of his men every day, to see that the firm is getting its money's worth. Just as soon as he fails to do this, and do it regularly, the daywork system will begin to fail too.

Another thing that the daywork foreman must keep in mind, is to pay in proportion to production. Just as soon as the day worker knows that he will get an increase in wages for a sustained increase in production, there is an incentive established that will do the business just as well as the piecework or bonus or premium system. Another point of advantage is that everyone can understand this kind of system, whereas certain classes of labor find it hard to figure what is coming to them at the end of the week under the more complicated systems, and get into an argument with the paymaster in consequence, or form the fixed idea that the firm is cheating them.

Straight piecework is the oldest of what is known as the "direct incentive" systems. By "direct incentive" is meant that the pay is

*Piecework Pay* strictly in proportion to the amount of work turned out. It has the same advantage as daywork, in that almost anyone can figure what is coming to him as pay; it also has another advantage in that if there is one worker, as there often is, who stands far above the average in speed of pro-

duction, he is sure of a pay envelope correspondingly big.

Piecework has received a bad name among workers because of its abuse by shops which had a poor daywork system; in other words, where production was low and no one in authority knew what was a fair day's work. In installing piecework in such shops, the usual practise is to take the daywork records, roughly average the per-piece labor cost, and then fix the piecerate at a slightly lower figure. The daywork costs being far from accurate, the piecework prices are usually way off also. Under such conditions, it is soon discovered that on some jobs the men are "running away with the payroll," and the firm at once begins to cut. As a natural consequence, the workers hold back on production, setting themselves a certain limit in earnings to avoid further cuts. Experience has proved that if piecework is to be successful, low rates must be raised, but that high rates cannot be lowered unless the method of making the piece is changed. This is modified in some plants by guaranteeing rates for periods ranging from one to two years.

One disadvantage of piecework as compared with fixed prices, is that it does not take the labor market into account. Day wages increase or decrease, according to labor

conditions, whereas piecework prices remain fixed. Thus workers will leave a piecework shop when times are good to take advantage of high day rates.

Under piecework the foreman cannot shift a job when required to a low-rate employee, and thus cut the cost, as he can sometimes do under daywork.

Manchester Piecework is the name given to straight piecework with a guaranteed minimum pay. It is designed to overcome the

*Manchester Piecework* objection on the part of beginners on the job that they fail to make a living wage while learning, and also to protect those who have become skilled, but whose work is occasionally handicapped by poor material or other factors beyond their control. Under straight piecework, the worker has to suffer for things outside of his control, unless the foreman is given authority to make allowance for justified cases of hard luck of this kind by paying day rates temporarily.

Another is the Taylor Differential Piecework System whereby two prices are put on the same job, the high price being paid when

*Differential Piecework* the job is done within a specified minimum time.

When the job takes longer than the minimum time, the low price is paid.

Let us assume that the work is the manu-

facture of a certain part of the motor. Careful time studies are made of average workmen, and a standard time is set for that particular process. Suppose it has been found that, allowing for unavoidable delays and necessary rest periods, 1 hour and 36 minutes is a good average time allowance for the manufacture of a single piece, and the rate fixed for each piece on such a basis is 90 cents. In an eight-hour day, then, one man should turn out five pieces, and earn \$4.50.

But his time study of the workmen's operations shows the manager that an efficient workman can produce more than five pieces in eight hours. In fact, he is convinced that a first-class man should turn out six or even seven in that time. To stimulate maximum effort, therefore, the high rate is fixed at \$1.00 per piece. In other words, the man whose production exceeds five pieces gets ten cents more per piece than the man who is just average. If he makes six pieces in eight hours he gets \$6.00.

This system of differential (or differing) rates provides a definite money stimulus to the ambitious worker. At the same time, by reason of two rates, it lifts the efficient man into a separate class from the worker who is just "good enough." A fault of this system

is that it is complicated and difficult to understand. Partly for this reason it is not in use to any great extent.

The Premium System, while somewhat complicated, has been next to piecework more successful than any of the others. It can best

**The Premium  
System**

be applied to workers of good intelligence, who are able to understand it. No system of pay is successful if the man who is being paid by it doesn't understand what he is getting his money for.

As commonly used at present, *a standard time* is chosen for the given operation. This figure represents the length of time the work should take when performed by one of average skill. To this figure is added an extra amount, so that the total represents the time under which a man will begin to earn a premium. If he completes the job in the total time, he does not receive any premium, being paid at his regular rate. If he completes the job in less than this total time, the saving is divided between him and the firm either "fifty-fifty," or in some other proportion agreed to in advance. This system has the disadvantage that while a man's effort per piece increases in getting out a big production, he receives less and less additional reward under this system, for each additional piece per hour.

It goes without saying that a specialist is required to install a system of this kind, and to set the premium allowances. The average production man will never be called upon to do this himself. Premium work is not as common as it was five or six years ago.

In figuring a man's wages according to the piecework system, all that it is necessary to do is to multiply the price per piece by the number of pieces finished, the product being the pay for that number of pieces.

When you figure wages under the premium system, the process is a little more complicated. Every foreman however should understand how this is done, and the following example will illustrate it. Suppose that the time limit set on a job (which is the time under which a premium will be earned) is 10 hours. Suppose the man having this job finishes it in 8 hours. He would of course be entitled to a premium on the two hours saved. If the saving is divided fifty-fifty, half to the man and half to the firm, and the hourly rate of the man is 80 cents, the wages are figured as follows:

Eight hours at 80 cents = \$6.40, plus a premium of one-half of the time saved, which is one-half of 2 hours at 80 cents per hour.

The wages of the man will therefore be

$$\$6.40 + 0.80 = \$7.20$$

A still more complicated scheme is the Rowan Premium Plan, which is so arranged that the premium is automatically cut down when the time rates are set too high. Under this system the premium is figured by the following equation:

*The Rowan Premium Plan*

$$\frac{\text{Day rate for the time consumed} \times \text{Time Saved}}{\text{Standard Time}} = \text{Premium.}$$

For example, suppose that the rate per hour is 75 cents, the standard time for the job is eight hours, and the job is finished in six hours. The premium would be arrived at as follows:

\$4.50 (six hours at 75 cents)  $\times 2 \div 8 =$  \$1.12. The total wages would be, at the rate of 75 cents per hour:

$$6 \times 0.75 = \$4.50 \text{ plus the premium of } \$1.12, \\ \text{or } \$4.50 + \$1.12 = \$5.62.$$

Now, suppose this job to be finished in four hours instead of six. Under this system, the premium would be \$3 (four hours at .75 per hour)  $\times 4 \div 8 =$  \$1.50. And the total wages would be \$3 + \$1.50 = \$4.50.

You will notice that in the latter case, while the time saved was double that saved in the first case, the premium is not double but only a few cents more.

The Task and Bonus System uses a stand-



ard task established by time study. If this task is exceeded by the workman he is rewarded by being paid for the entire time at an increased rate, whereas if he falls short of this task he is paid for the time taken at the low rate. The high rate consists of the low rate plus a certain fraction of the low rate, say one-quarter. Suppose the job calls for the completion of a task in 8 hours; and it is completed in 7. If the low rate is 60 cents per hour, the workman will receive for the job, full time (eight hours) at 25 per cent over the low rate, or in other words will get 8 hours at 75 cents. *The Task and Bonus System*

This system was discontinued in government shops because it was too complicated for many of the workers to follow. The same objection holds for premium work also.

A somewhat different idea underlies the Sliding Scale System, which is used in this country principally in the iron and steel industries. The wages here are on a piece-rate basis, but are so adjusted that the piece-rate rises and falls with the selling price of the product. Wages are thus related to prices, and the result is to bring about a crude sort of profit sharing and loss sharing. *The Sliding Scale System*

The two prevailing systems of wage pay-

ment are daywork and straight piecework. This is true because they are simple and can be understood by anybody. If a special system of pay is to be successful, the workman must be able to figure his own wages, knowing his own production. You yourself would dislike to work under conditions where you would practically have to take somebody else's figures on your earnings, without being able to check them up.

In order to get people to work full time, it is often the custom nowadays to add a certain amount to each week's pay for full time performance. This may vary from 5 per cent to 10 per cent of the total weekly pay.

#### *Special Rewards*

A capable foreman may originate various ways to appeal to his men through the pocket-book; if they are sound, he will generally find the management in full sympathy with them. Sometimes lump sums are offered for best sustained production over a given period; at other times the reward may take the shape of an increased wage rate.

It is well to keep changing the nature of these rewards fairly often—at least every few months—as it is human nature to get accustomed to a new scheme within a short time, after which it loses much of its force. Variety

in such matters will strengthen the appeal through the pocketbook and keep interest at the high point.

Many excellent ideas for production efficiency have come from the workmen themselves. The best incentive for good suggestions is a knowledge on the part of the men that they will be paid for if *Paying for Good Ideas* accepted and used. Sometimes it is left to the foreman to accept or reject an idea; in other shops a committee of the higher officials passes on these matters. The chief essential to success in running a suggestion system is to pay in proportion to the worth of the idea, and to pay promptly. Better results will be obtained from a scheme of this kind, if instead of simply asking for suggestions, some specific question is stated on which suggestions are desired. In this way, also, a large number of useless suggestions are likely to be avoided.

Remember that no matter what system of pay you employ, its success or failure is measured by whether or not you get a full day's work for a fair day's pay. The labor market determines what a fair day's pay amounts to—the foreman hasn't much to do with this nowadays. His part of it is to determine what constitutes a fair day's work. When he does this intelligently and ably he is a good fore-

man—providing he insists on getting what he pays for. When he doesn't know what a full day's work amounts to, he can rest assured that the men are not going to give it to him.

## VII

### Difficulties in Handling Men

**T**HE amount of supervision a foreman or department head can give to each worker depends largely on how many there are in the department. Modern management methods tend to reduce the number of people supervised per foreman, and to specialize the foremen.

Under the "scientific management" or Taylor system, for example, a single foreman is replaced by seven or eight different foremen, working under the instructions of a central "Planning Department." One of these *Providing Ample Supervision* "functional foremen" is the Inspector who sees that each man understands the proper method of doing his work and how good it should be. A second is known as the Gang Boss; his duties are to see that each man places the work properly in his machine and actually uses the most efficient methods and motions in turning it out. Then there is a Machine-Speed Boss, who sees that the machine is speeded up properly and that the appliances used on the ma-

chine, if any, are properly placed and adjusted. In addition, there is the Repair Boss, who keeps the equipment in repair; the Time Clerk, who takes care of reports, records and pay; the Route Clerk, who directs in what order work shall be done; and the Disciplinarian, whose title explains itself. This means a total of seven men under whose direction the workers carry on their operations. Of course, each of the seven foremen looks after a considerable number of people; nevertheless, the cost of supervision is high.

At the other extreme one man may "run" a department of from 50 to 100 people. Between these two extremes are all kinds of intermediate cases. The amount of supervision to be given and the proportion of direct labor expense to supervisory expense are problems that each plant manager must settle for himself.

Roughly speaking, if you have 20 people to look after, in an eight-hour day you can give each one not more than  $8/20$ ths or  $2/5$ ths

of an hour, or 24 minutes. Nat-

*Distributing the  
Foreman's Time*

urally, you will frequently deal with two or more of them at one time in giving your instructions and criticisms; but in that event you will be unable to give each one close personal attention. Even this small allowance will be cut down by the

necessity of giving part of this time to getting instructions yourself, looking up orders, etc. Probably an average of 15 minutes per worker would be more like it. In other words, your workers will be "on their own hook" and not personally supervised by you an average of 7 hours and 45 minutes out of an eight-hour day. Under these circumstances, it is necessary to make that 15 minutes count for all it is worth. Some of the new people in your department or the less capable members of it will need much more than this fifteen minutes per day. The only way in which the foreman can spread himself over the ground is by using the "exception principle."

Successful men who have charge of large affairs do not spend much time on things that are going along in a routine way, but they spend a great deal of it on things that are not going as they should. *The "Exception Principle"* This is the "exception principle," which consists in finding the high spots and hitting them.

You must divide your day's work on this principle. Avoid spending time on things that are satisfactory, but make every minute count on something or somebody that really needs your help.

Make use of the time system to help you find the high spots by having called to your

attention—if the time office does not do this already—the jobs that ran over the proper time yesterday, or better still, that are today running over the limit. Don't bother about the jobs that are going along all right.

On the same principle, make a list in your notebook of the men in your department who need special attention, and study as closely as you can just how to make each minute spent with them of the most possible help. This will raise your "efficiency per minute."

Study the effect of "suggestion" on your men. If you can suggest a better way of doing work and lead the man to believe that it is his own idea, he will put a lot more energy into demonstrating that his way is the right way to do the job than he would put into demonstrating what he believed to be your idea. That is human nature.

One of the things that a foreman or superintendent should be able to do, is to "smell trouble" before it arrives. This gives him an opportunity of forestalling it. Some managers who are experienced in this line can tell you almost without fail that trouble is to be expected from such and such men. A man of this kind will sense the trouble almost before it is known to the ones in question. Sometimes he is tipped off by another member of the department, but



more often his observation has told him that so and so is dissatisfied about something. When you get this feeling, go right to the bottom of the matter before it has time to spread. You can forestall a lot of trouble by going up to a man and saying, "Jim, there seems to be something under your hat. Are you dissatisfied about anything?" After you have opened up in this way the average man will either "get it off his chest" or else will forget it. In either case it is much better than to let him nurse a fancied grievance.

Keep in mind that most shop trouble originates in the personal grievances of two or three men, which are magnified by them and spread discontent among others. Also keep in mind the fact that when such a man has had a fair chance to air his troubles to the boss he seldom cares to go farther. It is like letting the pressure off of soda water by opening the bottle before it bursts and cuts your face.

Some men are chronic grouches and these are difficult to handle. Very frequently such men are among the most skilled members of the department, which makes it necessary to retain them. The *Handling the Chronic Grouch* thing to do in getting the upper hand of such people is to spring a surprise on them. Give them something they do not ex-

pect. As an illustration, here is a case which came under the writer's observation.

A man of this grouchy type was foreman in a shop in which a new superintendent took hold. This foreman had the reputation of being a "super killer" and expected to add to his reputation by downing the new "super." The superintendent's first move was to go around to all the departments and have a talk with each foreman. When he came to the grouch, all that he could get was a surly yes or no. The super had met this type before and determined to give him something to think about. So he spent a good part of each day for the following week watching the work in this man's department, never exchanging a single unnecessary word with the sullen foreman. A few days of this sort of strategy "got the other fellow guessing." After the first week he warmed up very nicely and volunteered considerable information. Within two weeks the superintendent did not have a better friend in the place than this man.

It is good strategy to "keep the other fellow guessing," at least until you have had an opportunity to size him up and analyze him and lay out a definite plan of dealing with him.

You have gathered from your experience and from the remarks in this Course that industrial life, as far as its human relations are

concerned, consists in obtaining certain definite results from men. In obtaining these results, you have learned that the most speedy and effective means *Finding the Best Point of Attack* is to make a study of your man and find the best point of attack, or method of approach. You will practise this and become more proficient at it every day, if your ambition is to become a real manager of men.

In a measure, your moves will resemble the tactics of warfare, except that there is, or should be, no enmity in them. As soon as personal enmity comes into your plans, efficiency will depart. But the strategy, the planning, the attacking along the adversary's weakest lines, resembles the art of warfare. And just as the success of a battle, or campaign, will depend on the care and judgment spent in planning, so your success as a manager of men will depend on the care with which you plan in detail just how to go about the moves that you make in your dealings with those under and above you.

Another important point, which this comparison of warfare will make clear to you, is the need of building up *Building Up Your Defences* your own defences. There are always men in every shop or factory who are on the lookout to get the best of the boss. When a new foreman or superintendent comes on

the job, there is a human tendency on the part of everyone to refuse to recognize him as "the real thing" until he has demonstrated it himself. Many times this tendency amounts to active opposition on the part of certain men who consider themselves to be the real leaders of their respective gangs; not appointed by the company of course, but self-appointed. These men, according to their ability, do what they can to get a line on the new boss and undermine his authority. They usually have some "shop problems" connected with their work, which will stick the average man who is not familiar with the methods employed in this particular shop. One common trick is to spring a question of this kind on the new foreman and get the laugh on him because he is unable to answer it. An old-timer, for example, will ask some innocent-appearing question about the adjustment of his machine or equipment with the idea of leading the foreman into a foolish blunder.

The answer to all such tactics is, Don't bite. If possible, turn the laugh on the fellow who is asking the question. If you don't know the answer or how to get it, don't make the mistake of guessing at it, or of floundering around and apologizing for it. A policy of say-little during the first week or two in a new job is

the best sort of defensive policy while you are preparing your own offensive.

One of the hardest conditions for a new department head to face is found in entering a department where there are cliques or "rings." The first thing to do under such circumstances is to study conditions and *Breaking Up Cliques* get as much information about them as possible. Find out which ring has the most influence. The new foreman is weak, and the ring is strong. To establish himself, he must get the support of one of the rings—if not the strongest one, at any rate the next strongest one. After he is established, it is a different matter. His move under such conditions will be to tread lightly until his control is established and then begin to eliminate the ringsters. This can be done gradually by transferring one man at a time, working new men of the right kind into the department, and encouraging the troublesome ones to look for jobs elsewhere. In the course of six months, the right kind of a foreman will not be at the mercy of shop politics, but will himself be the real boss. The foreman who goes into a weakly-disciplined shop full of rings and cliques and sets the example of freeing his department from them, has a mighty good prospect of winning advancement in short order.

Perhaps the hardest cases of any to handle

are those of men with a certain amount of ability but with "swelled heads." There are

### *Handling "Swelled Heads"*

two results to go after in a man of this type, providing he has ability enough to make it worth while to hold him. One is to cure him of his complaint, the other is to make the most use of him while so doing. The cure is usually a long process. Some cases cannot be cured, but nine out of ten can—with one remedy which as a cure for swelled headedness has no su-

perior. It consists in "showing the man up." Let him see for himself that he is not the greatest thing that ever happened in his line.



The best treatment  
for swelled head

To do this, you may have to get a new man into your department for the purpose, or if this is inadvisable, do as Hank Jones did.

Hank was foreman of the lathe department of Letchworth and Gowdy Machine Co. He had a man named Beck who was an A-1 mechanic particularly skilful in turning press fits, and knew the line from A to Z. For his work he was the best man that there was in the plant, but unfortunately he knew it. He had a swelled head and took advantage of every

opportunity to show his independence. Hank did not want to let him go. In discussing this case with a brother foreman from the car shops, Hank hit on a scheme that was effective. The car works made twenty press fits to one that was made at Hank's shop, had the men on piecework and had developed some fellows who could almost shut their eyes, set the tool, and say "this will go on at fifty tons."

Hank made some excuse or other that led to having Beck accompany him on a visit to the car shops. Hank saw to it that they should pass through the wheel shop and stop near a certain fitting lathe. The car shop foreman had it all arranged with his best man to show off. In went an axle, up went the tool, on went the micrometers and out came the shaft, all in less time than Beck usually took to start his cut. "What will that go on at?" asked Hank. "Between fifty and fifty-five," said the lathe hand. "Like hell it will," said Beck. They accompanied the job to the press and saw it go on at fifty-four tons. Beck went back a changed man, for he had been quietly, but thoroughly, "shown up" and he knew it.

When you have to handle a case of swelled head, therefore, use the showing-up remedy. Apply it yourself or get it applied by someone in your own shop, if you can; but if not, take the patient outside for treatment. It is

well worth the expense to take a good man a hundred miles if necessary to cure him of this complaint.

Nothing upsets the work in any factory more than repeated absences or tardiness. Especially in good times when work is plentiful, men get the habit of laying off.

*Cutting Down  
Absences*

High wages and overtime do not seem to cure matters, but rather make it worse. The foreman is the one who first notices these things, and who suffers the most from the effect of them. It is up to him to help correct this condition, even though the firm may have as part of its regular system some bonus scheme or other plan for rewarding full-time attendance. The foreman must back up the efforts of the firm by personal work among those who lay off.

In the case of a shop superintendent or the foreman of some large force which is not controlled directly by general shop rules, it may sometimes be proper and effective to handle the problem of getting men started on time in the mornings by posting a notice on the bulletin board or having a copy handed to each man. This has the advantage of putting up the situation in an impersonal way. It will straighten up some of the more conscientious workers and will leave you free to go after the hard cases more directly and vigorously. Any



general notice of this nature should be courteous and carefully worded, so as to avoid arousing antagonism and sneers among the men, and yet should be unmistakably firm and clear. A rather good example is the form shown below, which was recently posted in a shop where both men and women workers are employed:

#### HOURS OF WORK

The hours of work in this shop are liberal and *must be lived up to*.

There has been a recent tendency on the part of some people to disregard them, perhaps unthinkingly.

*Starting work* at 7:45 does not mean at 7:50, 7:55 or 8 o'clock. You should be at your place and on the job at 7:45, ready to work when the gong sounds. Promptness in starting work at the end of the noon hour is just as essential. Put a little snap into these starts; it's good business for you as well as for the company.

It isn't necessary to make ten or fifteen-minute preparations for departure. You should be at your appointed places right up to these hours. All preparations for dropping work should be made *after*, not before, the closing gong sounds.

These are times when it is up to each and every one of us to be constantly "on the job." We don't want any slackers in this organization—and I, for one, don't believe we have any willful ones. It is necessary, however, to remind those who every once in a while forget.

I hope to have the cooperation of every man and woman who is employed here in this important matter.

Some plants have installed a bonus or prize system to cut down absences and tardiness, offering a slight money reward to those employees who have a perfect attendance record

for a given period. The Westinghouse Lamp Company, the Steel Equipment Company, the Yawman & Erbe Manufacturing Company, the Goodyear Tire & Rubber Company, and the Queen City Machine Tool Company have used such schemes, and found them valuable. In some cases the bonus is paid in thrift stamps or in the form of a vacation.

But the prime essential in this, as in all problems of handling workers, is the personal leadership factor. If a department head has developed the right kind of control, his personal influence will be much greater with the men than any money stimulus. He must not fail to notice every case of absence, or repeated tardiness, and inquire as to the reason, explaining just how this hurts the department and causes it to make a poor showing. This is as much a part of his duty as seeing that those present do their work properly. It has a big effect on the men, makes them aware that "the boss" takes a personal interest in them and notices at once when they do not do what they should.

In fact, it might be stated as a general law that the only permanently effective way of dealing with inattention, carelessness, grouchiness, ill-temper, conceit, suspicion, and hostility is for the foreman to use the exception principle and give his personal attention to han-

dling the difficulty. It calls for thought, headwork, careful analysis, planning, and execution. Each case has to be treated on its own merits, in accordance with the original size-up. All of the ten essential traits of the good production man are called for if the foreman is really to handle these exceptional cases smoothly and with the best results both for the men and the plant.

And in so doing, he will not only bring a speedier solution to the problem, advance the production rate of his department, and reduce labor turnover, but in many cases he will be warding off labor troubles for his plant. *Preventing Trouble* "Most labor troubles are found to root in bad handling by foremen," says Whiting Williams, who in 1919 made a close study of the mental attitude and make-up of common labor by himself putting on overalls and cap and becoming a common laborer. Ninety-eight per cent of the disputes dealt with by the War Labor Board were found to start with some small differences between the foremen and the men under them.

A show of authority, orders, bossing—these will not solve many problems for the foreman today. The winning idea is leadership. Leadership, based on the ten traits, will carry him far.

## VIII

### Fitting Jobs to Men

**I**N earlier chapters of this text-unit a good deal has been said as to the necessity of getting the best "line-up" of a working force by fitting each man into just the right job for him. This may involve shifting the men about somewhat in order to try them out in various kinds of work. It is one of the most important duties of any live shop executive.

But there is another closely related problem which we must now consider. Sometimes the men (or the women) working under your direction cannot measure up to the jobs for which you are responsible.

*When Skilled  
Workers Are  
Scarce*

When there is a labor shortage, this situation arises not merely "sometimes," but very frequently. In such times, it will be more and more commonly true that you will draw up your specifications for skilled men, but will actually get only semi-skilled men or perhaps untrained women or boys. What are you going to do about it? Swear at the employment office or grumble about the rottenness of things in general? That isn't

going to do you any good in maintaining your output.

There is only one policy that will enable you to get the results you want. When it is impossible to find men who will fit into your jobs, you must take the other line of attack and remake the jobs to fit your men. How?

Early in the war with Germany, Mr. John Calder, the Director of this Course, was called upon to take the management of a \$3,000,000 contract to manufacture seaplanes for the United States Navy. The factory was located in Keyport, N. J., a small town at too great a distance from manufacturing centers to possess a large resident population of skilled workers. Practically no one available knew anything whatever about this line of industry. At first glance, there seemed to be little chance of organizing a working force that could complete the contract within the specified time.

Mr. Calder's solution of the problem was the one just suggested to you. He analyzed the process of making a seaplane. He split up the complex process into a number of operations, each one so simple that it could be mastered almost at once even by an untrained person. His next move was to engage a few capable executives to supervise—and, especially, to instruct—the workers. Then he employed a large number

*Splitting Up  
the Job*

of green hands, many of them country people who knew nothing whatever about factory methods, and had each person taught to perform one simple operation. One of the best workmen thus quickly secured and set at productive work had been a butcher and had had no other experience. Within a short time Mr. Calder had an efficient plant organized and in full swing. And, in spite of the lack of skilled labor, the contract was one of the few actually completed on schedule to the entire satisfaction of the naval authorities.

This instance is not cited as anything remarkable or exceptional, but rather as typical of what must be done often, in every line of

*A Problem We  
Must All Face*

industry, when skilled workers are too few. The jobs must be broken up and made over to fit the unskilled. You may or may not be in a position to do this for a whole plant; but in any case you will find yourself called upon to assist in the undertaking—or more probably it will be put up to you to keep up the output in your own department. In that event you will be face to face with the same problem that Mr. Calder faced, and you will want to apply the same principles he used.

While we have used the common term "unskilled labor," there is, strictly speaking, no such thing. Every act that is done in industry

becomes better done through practise, from digging a sewer trench to designing the most complicated piece of machinery. In other words every kind of employment is skilled after the worker has become experienced in it. The degree of skill required for different acts varies, as does also the degree of intelligence. This has resulted in laborers being roughly classified according to their intelligence and experience, the less exacting tasks being assigned to those having the lesser amount of experience or intelligence—or skill.

It is your job to study how far you can go in turning over to these less experienced and intelligent workers the work that was formerly regarded as highly skilled. The success of a foreman or manager during the next generation or two will in *Brains Are in Demand* large part depend on how well he is able to do this. The prospects are that the demands on industry during the next twenty years will be such that it will be necessary to make use of every human brain and hand to do the very highest class of work of which it is capable. Machinery will be developed to take care of crude work which chiefly requires physical strength.

As a matter of fact, the employment of "skilled labor" may in one sense be considered an admission of lack of ability on the part

of industrial managers. It is easier to hire a man who knows how to do a job than it is to tell an untrained person exactly how to do it and then see that he does it properly.

This tendency, of course, is steadily raising the grade of leadership required. In other words, it is elevating the position and importance of foremen, since it places new requirements upon them.

The "skilled worker" of the old type obtained his skill through many years of experience in his trade. It was the kind of skill that could not be acquired in short order. His abilities covered a wide variety of tasks, all of which he could do well.

*The Old and the  
New Types of  
"Skilled Worker"*

Usually there was one thing that he could do better than anything else, but he was not necessarily put at this one kind of work. Often there was not enough of it to keep him busy.

In "diluting" industry, as the phrase goes, with workers who have not had this experience, and are relatively unskilled, it is necessary to adopt a new working plan. The new plan involves decreasing the variety of tasks that each man is called upon to do. In other words, the job is simplified, thus making it possible to become skilful in this simplified job in a very short time. This is technically called the specialization of labor.



A worker trained under this plan becomes highly skilled in performing a few simple operations, whereas the old "skilled worker" could handle a large variety of work. As between the two, the specialized worker will nearly always turn out a bigger production at a lower cost than the all-round skilled worker would ever have thought possible.

Let us review now the steps that must be taken in order to adapt the work of a complex department to the capacity of untrained workers. We have in mind a department which was formerly manned by skilled labor, but must be carried on with those less skilled or even quite unskilled.

First of all the process in your department must be carefully gone over, operation by operation, grouping the operations according to the length of training necessary to acquire the skill to perform. The result of this analysis will give us, for example, one class of operations which may be performed by practically any one after a day's training. It will give us another class for which at least a week's training is necessary to impart the required skill to an average "green" employee. Another class of operations will require two weeks' training, and so on. At the top there will remain some

*Classifying Operations  
According to Skill  
Required*

that demand real skill based on thorough training and experience.

Fortunately, it is very seldom that the whole force of a department must be filled with unskilled help. As a rule, it is a case of replacing one man at a time. The obvious way, of course, is to keep your really skilled and experienced workers, so long as they remain, on the difficult operations. Do not let one of these men or women for efficiency's sake touch a job that it is possible for one less skilled to handle. -Start breaking the green hands in, according to their intelligence, on the lower groups or classes of work, promoting selected ones to the next higher class as they show aptitude for it.

At the same time that you are handling things in this way, in order to keep them going, you should be studying each job in the higher classification with the view of bringing it down into a lower class if possible.

*"Breaking Up" the  
Higher-Grade Jobs*

This may be done in several ways. Sometimes the adoption of new tools or equipment for doing the work will put it within the reach of the less skilled worker. Sometimes a job can be split into two parts, one of which falls into the lower classification, while the other part remains in the higher one. Machine tenders, for example, can take care of the actual feed-

ing operations after the machine setter has set the machine for the job it is to handle. The setting-up comes in the group of skilled operations, and will probably always remain there; but the feeding and tending of the machine require far less skill. The more you can take away from the higher groups, the better you are adapting your work to modern labor conditions; and the easier it is going to be for you to run your department successfully with unskilled labor.

In the chapter preceding we saw that the average foreman has very little time to give to individual instruction of his workers. For this reason, when the untrained are brought into a department, *Providing Ample Instruction for the Unskilled* even if given some preliminary work in a "vestibule school," it is necessary to arrange for more supervision than can ordinarily be expected from one man. Suppose that you have been foreman over twenty skilled workers. Knowing their business as they did, a few minutes a day given to each of them was enough—all you had to do was to tell them what was wanted and you generally got it. If your department is to be diluted with, say, fifteen green hands, retaining five of the skilled hands, a condition will arise calling for quite a different scheme of organization.

Perhaps this will be provided for by the company through instructors or teachers, who will instruct the new people as to how to do the work and will give them frequent help and inspection. If this is not done by the company, you must take care of it yourself, by selecting from among your skilled men some who are fitted to instruct others. Give each of these assistants four or five of the newer employees to look after. This can be done very often without sacrificing the producing capacity of the skilled man to any serious extent. Such work, of course, deserves some additional compensation for these men, either in a higher daily rate, or in a bonus based on the piecework earnings of those under each subforeman or instructor.

There are very few lines of industrial work in which women will not play an important part during the next ten years. Experience has shown both in England and in the United States since the war, that women, aside from their lesser physical strength, can perform many tasks formerly classified as work for highly skilled men. It is

*Adapting Operations  
to Women Workers*

generally reported that they not only produce as large an output as men, but they spoil less work and make a higher average in quality. Also they stick to the job better than men and have bet-

ter records for attendance and promptness.

In view of this situation, the foreman who has not had experience in managing female help will do well to make a study of the principles involved; and also, if he wishes to keep ahead of the game, will consider how he may employ them in his own department.

From the point of view of the factory, the chief difference between male and female help lies in the woman's lesser physical strength. This is the main thing to be kept in mind in planning work for women. Put them on light work only. Or if heavy work is to be done by women, means for mechanical handling must be provided. This applies not only to moving materials and tools, but to manipulating machine levers and the like. Since most machines were not designed for operation by women (although modern designers are now giving attention to the requirements of women operatives), the heavy machinery in most plants is unsuitable for their use, at least without adding new devices to reduce the demands on physical strength.

Another class of work, while not classified as heavy, yet requires repeated muscular effort. Most women are not adapted to this kind of work.

The ideal class of work for women is light

machine operation, inspection work, light assembling, time keeping, clerical work, shipping, and the like. The requirement of a high degree of skill does not bar them from a job, but makes it more suitable. With the same previous training the average woman will rapidly acquire skill.

*Jobs Suitable  
for Women*

Assuming that your firm has decided to employ women wherever possible, and has made the necessary arrangements to take care of them, it is likely, as the next step in the matter, to put it up to you to say where women can be used in your department. If called upon to answer this question, go over your grouping of operations into classes, and pick out all of the jobs that you find suitable for unskilled labor after reasonable training. Then strike out all of the jobs that require heavy handling or continuous and hard exertion. Much of what is left should be suitable for women.

If you have a man doing light fitting, assembling, soldering, welding, or anything of that nature, ask yourself why a woman cannot do this work.

If you have a man performing repeated inspection operations with simple gauges or other such devices there is a fine opportunity to use women.



*(From General Electric Co.)*

**WOMEN ARE ESPECIALLY ADAPTED FOR SOME LINES OF INDUSTRIAL WORK**  
Winding Electric Motors Calls for Patience, Accuracy, Skill, and Reliability, and Women  
Have Proved Extremely Capable in this Work





In some types of plants women can be used as timekeepers.

Colored women make very capable shop sweepers.

Young women can sometimes be employed as shop messengers to advantage.

Women stock keepers do good work where there is no heavy lifting.

Where handling of freight is not required, a bright woman with high-school education makes a capable shipping clerk.

In order to make female employment profitable, a high quality of help must be attracted. This is next to impossible unless extensive plans are made to accommodate *Supervising Women Workers* women employees by installing rest rooms, suitable lunch rooms, and such features. A clean light shop is a big inducement in obtaining women help, whereas a dark and dirty one will drive away those who are most desirable. The training of women workers should proceed along the lines laid down for the training of the unskilled.

As a rule, a woman foreman can maintain better discipline among women employees than a man. It is a good plan to secure a woman sub-foreman for your department, if the number of women employees become great enough to warrant it.

In instructing new women employees, see that the safety-first idea is well impressed upon them. Men who have been brought up in shops know more or less about the dangers of machinery, whereas it is quite different with a woman who has never been in a shop before in her life. Call attention carefully to the things that must be avoided. Be careful that the clothing worn is not such as to be easily caught in machinery and that the women employees keep their hair well bound up in a shop turban.

One thing that should be kept in mind in the employment of women is the necessity for allowing rest periods. Women cannot work as continuously as men without becoming fatigued. It is good policy to allow a ten-minute rest period in the middle of the morning and again in the middle of the afternoon. This has been found to increase the efficiency of the workers and to make the job more attractive to them.

In the dilution of skilled labor that will take place during the next twenty years, there will be occasion to use considerable foreign labor which formerly found employment in outside work, such as railroad construction and the like.

*The Increase in  
Foreign Labor*

The more intelligent of these workers will find their way into indoor industrial work.

As a rule, these people are very adaptable and can be trained along exactly the lines laid down in this chapter. One big point with this class of labor is to stimulate its Americanization—and this is a point that every American will gladly keep steadily in mind and consider a part of his duty as a citizen.

Usually you will find that the foreign workmen are very eager to become full-fledged Americans in every sense, and only a little encouragement and friendly help is needed to get them to studying English and to bring them into our American way of doing things. In fact, they are frequently ahead of our own expectations of them. A safety engineer who was called on to talk "safety first" to a mixed group of workers in a Pennsylvania plant tells of an interesting experience. There were on the platform with him a Greek and a Roumanian; the safety man would talk a few sentences, then the Greek would translate it into his language for the benefit of the Greeks in the audience, and after him the Roumanian would put it into Roumanian for those of that nationality. After a few minutes of this slow and laborious method, a grimy-looking fellow out in the crowd held up his hand and said, "Mr. Boss, you speaka English; we catch 'em."

And so it is in many cases. They catch on

to English even more rapidly than one would expect. Usually they are eager to learn it, and appreciate any effort to help them. One man who recently had occasion to work very close to large groups of foreign-speaking laborers in coal mines and steel works, said:

"I come back with a strong respect for the brawny arms and hairy sweaty chest of the husky foreign-born unskilled worker who is at the bottom of our present industrial structure in America. The biggest thing I learned about him is that he's more like the rest of us than he is unlike us. In the big things

*A Human View  
of Foreign Labor*

he's just human—just about as crazy about his wife and kids as the rest of us under the same conditions, just as anxious to have a steady job which permits him to hold up his head with the rest of the boys, just as anxious not to have to worry too much about the future—and just as anxious to play as fair and square as the rest of us so long as he thinks he has a chance for a fair go at our hands. One thing is sure, we can't dig coal or iron ore or make steel without him. If we can't make a good worker and a fair and reasonable citizen out of him with all the good impulses of his heart to offset the limitations of his untrained hands—if we lose him to the trouble-makers who don't want to be square—then I think that we who are proud

to call ourselves Americans are a pretty unappreciative, thick-headed, and cold-hearted crowd."

The foreign labor problem is frequently the foreman's heaviest cross, and makes the greatest demands upon his ability as an instructor and developer of men. But if he goes at it with the right attitude, with a little understanding and sympathy in his heart, with patience and tact and a sense of fairness, he will be rewarded with results that will count in higher efficiency for his department and a higher grade of citizenship among his men.

## IX

### Helping Men to Play Safe

**U**PON the leader of a department rests the chief responsibility for the safety of the workers in that department. It is, of course, the duty of the general management of the plant to put up guards, railings, and other safety devices and to use bulletins and other means of impressing the need for caution on all employees. But it falls on you, as the department head, to see that all the safety devices are actually installed on the machines in your care and that the rulings of the factory inspectors are followed to the letter. And you must stimulate the "Safety First" spirit in the mind of every one in your department, before it can be called really "safe."

Perhaps nothing shows the recent tendencies in production methods better than the change in attitude toward accidents in the shop. Only a few years ago the great problem was to determine who was to blame for the accident after it happened. Usually the worker had been careless and had to suffer the consequences. Today firms take a broader-

minded attitude. It is recognized that some workers are incompetent or inexperienced, that familiarity with machinery often makes even the skilled workman indifferent to works, and that it is human nature to take a chance. Modern management recognizes a responsibility of the plant to its workers. When accidents do occur, compensation to the sufferer is gladly paid.

But even better than compensation is accident prevention; and this is receiving more and more attention in most shops today. Some of the large corporations have devoted enormous amounts of time and money to safeguarding their machinery and conducting safety-first campaigns. As with all other activities in the plant, the best results can be secured by enlisting the cooperation of every man in the plant. Nor should it stop here, for much can be accomplished by securing the interest of the man's wife and family. In fact, the arousing of personal interest and thought is the best safeguard of all, being far superior to any mechanical device.

The cost of accidents is far more than the compensation of the injured worker. The attendant excitement delays work in the vicinity of the accident; there is a loss of product from the machine until it is again put in operation;

there is another loss of product of the worker while absent. All these elements go to make up a much larger total than usually thought.

The records of some of the well-known plants in various industries show a remarkable reduction in the number of accidents, these being due both to mechanical safeguards and to the spirit of cooperation which has been secured by the safety-first movement. A few typical records, reported by the National Safety Council, are the following:

	Decrease
American Smelting and Refining Co.	24 per cent
Cadillac Motor Co.....	69 per cent
Commonwealth Edison Co.....	40 per cent
Commonwealth Steel Co.....	69 per cent
Corn Products Refining Co.....	37 per cent
Fairbanks-M. Manufacturing Co.	72 per cent
Harrison Brothers & Co.....	75 per cent
Illinois Steel Co.....	85 per cent
Inland Steel Co.....	35 per cent
International Harvester Co.....	88 per cent
Milwaukee, C. & G. Co.....	83 per cent
Neenah Paper Co.....,.....	83 per cent
Packard Motor Car Co.....	72 per cent
Pullman Co.....	46 per cent
Rochester, R. & L. Co.....	33 per cent

The saving in dollars and cents, not to mention the physical and mental anguish which has been prevented both to the worker and to his immediate family, cannot be estimated. But it is very safe to assume that it far out-



weighs any expenditure which may have been made on this account.

Another greater advantage of the movement to prevent accidents lies in the fact that the development of the safety-first idea—or, as some prefer to call it, the thought of “safety-always”—has done much to make the men in large plants feel that they are a part of the establishment and not mere machine tenders. The more ways in which this can be emphasized, the better for the plant in every way and the better for the men, the community and the world at large.

Machinery is not the prime cause of accidents. An investigation into accidents in Massachusetts textile mills conducted by the American Mutual Liability Association showed that the greatest number of accidents befell hand labor and in connection with the use of hand tools. Accidents caused by machinery were second on the list, and those due to slipping and falling were third. Accident records in other industries show in general the same conditions.

*Causes of  
Accidents*

The important thing for you to recognize in this connection is that safety is a factor in production and that you are responsible for the safety of your department just as you are responsible for its output. Of course you are not responsible for conditions over which you

have no control. Some industries are more hazardous than others, and working conditions vary from plant to plant. But there is not a plant in America today that will not welcome the efforts of its foremen to promote safety, to bring its workers into cooperation with the safety rules of the plant, and to make safety the daily thought and practise in all departments.

What then can the foreman do to promote safety? While there are a number of detailed safety measures that will be pointed out

*The Foreman  
and Safety*

later in this chapter, here we may note three main lines of action that the foreman should follow: (1)

Get thoroughly acquainted with the fundamentals of safety, know them and honestly believe in them; (2) Look out for opportunities to provide safeguards, and recommend such suggestions promptly to the management if he has not himself the authority to make the installation; (3) Fairly enforce the safety rules and regulations of the plant.

First of all, the foreman must know safety and believe in it. Discussing this question at a recent meeting of the National Safety Council, F. F. Morris of Chicago, formerly a foreman in the steel industry, said:

"The modern foreman must understand the fundamentals of safety. He knows that there

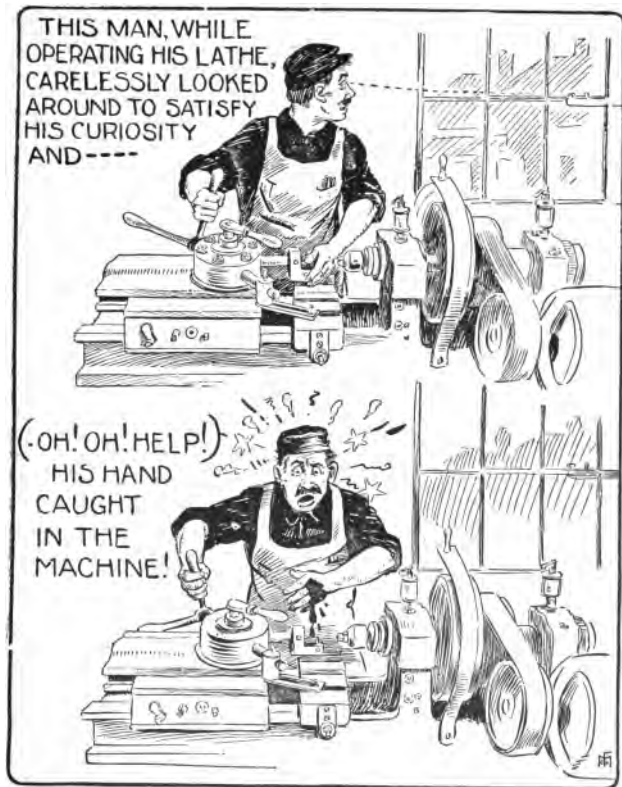


= *Ford Motor Company* =



# Use Your Head and Eyes When Working on Machinery!

See What Happens If You Don't



**It Pays to be Careful—We had 141 Hands Injured in 3 Months.**

**This striking poster of the Ford Motor Company has directly helped to reduce accidents in the big Detroit plant**



is a projecting screw on the line shaft—it may have escaped the vigilant eye of the factory inspector, but he knows it is there and he knows that the chances are that some day the oiler is going to get wrapped up on the shaft unless a safety set screw is put in there. When he goes through the shop and sees a drop of oil on the floor he knows where it comes from; he doesn't have to look to see that a drip pan has worked loose and that the oil is dripping on the floor. He knows that if that is allowed to continue a pool will accumulate there and possibly a truck driver will slip on that pool of oil and break a couple of ribs. He calls the janitor and sand is put down, and the repair man is called and the drip pan fixed.

“He must understand the principles of safety, and as a foreman he must be foresighted and see the accident before it happens. The foreman must instruct his men in a mild and sympathetic manner. I can imagine a new man coming into the job where the modern foreman is working. *Lining Up the Workers for Safety* The man comes over from the employment department; the place is strange to him and he feels that he is in the midst of strangers. He goes into the foreman's office and the foreman says, ‘Well, I'll take you over and show you where the locker room is.’ On the way to the locker room he is engaging

him in conversation, he shows him where the washroom is, and the first thing you know the foreman has his history. He knows that the new man has just moved to town; has a family; has a house—"Got a house? Well, you're a lucky dog. Didn't know there was one in town. Got a garden?" and so on. Then he takes this new man over to the machine, we will say a drill press, and starts him out to work drilling some small castings. The foreman calls his attention to the fact that he'd better take his necktie off because it is liable to get wound up; and his jumper sleeves are a little loose, and he'd better roll them back. By that time the new man is ready to listen because the boss has been a friend to him. This man in his work may feel that all the rest of the men in the shop are strangers, but he knows he has one friend there—the foreman."

Then the foreman must look to the providing of proper safeguards. He will usually find the management willing to listen whenever

*Providing  
Safeguards*

he has any practical suggestions to make along this line. And frequently the safeguard is something that can be worked out in the shop itself. In such a case, the foreman can frequently make the new safeguard a matter of interest and pride on the part of the men by entrusting its devising and installation to them. For a good example of

how this may be done we quote again from Mr. Morris:

"Suppose a foreman is on his way back to his office and passes a machine at which George Jones is working. He notices that the connection between the motor and the planer is whirling around at a great rate and is not covered up. 'George, did you ever stumble when you were working around this machine?' George thinks a moment. 'Yes, I remember I did once.' 'Suppose you should stumble and you put your arm on that coupling by the floor, you might get hurt pretty bad.' 'Yes, boss, I believe you are right. I think that ought to be covered up.' 'Well, that is electrician stuff. You call the electrician and see if you two fellows can't figure a guard for that.'

"So the electrician comes down and the first thing you know they have a sheet metal guard covering that coupling. It is a guard that will guard. It will always be there because the electrician who made it, planned it. He didn't design it, he thought it was a product of his own brain. As a matter of fact it was the same kind the foreman had in mind and he merely suggested to these fellows what kind of a guard to put on. That is what I would call a proper safeguard. The proper man will also

have his eye open to see that proper safeguards are provided."

*Disciplining  
for Safety* Finally there is a need of discipline. The safety rules must be enforced else they are not worth the paper they are printed on. And here comes the foreman's most delicate responsibility in connection with safety. He cannot afford to antagonize, he must educate. What he wants is to inspire confidence in the safety rules, get the men to cooperate with him. But whenever rules are broken there must be some penalty—else rules will continue to be broken and the number of offenses will rapidly increase. At the same time, there must be sympathy and understanding and control in the foreman's disciplining of the men here as in all his dealings with the human factor.

One commercial plant in upstate New York has a strict rule in regard to scratches. If a man gets a scratch and the scratch is broken he must put iodine on it. One day the foreman in a certain department noticed that one of his men had a bad scratch on his hand. There were no signs of iodine on the hand, and the foreman said, "John, that hand needs attention; you'd better go to the first-aid kit." The next day the foreman made it a point to stop at John's bench and he noticed that the scratch was still innocent of iodine. "John,"





## Danger—“Mushroomed” Heads

To use Tools in This Condition  
is Worse Than Foolish—It is  
Almost Criminal.

Heads

Like

These



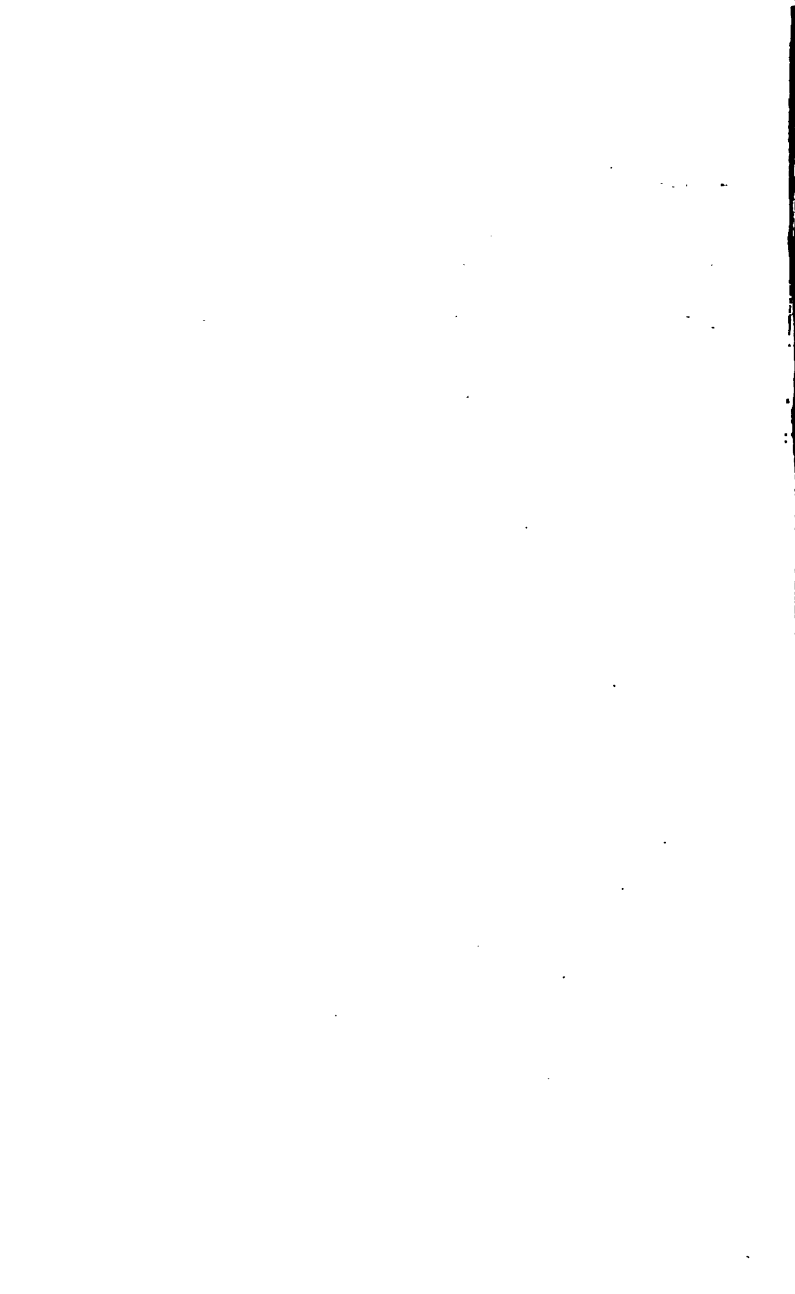
Mean

Trouble



When you find chisels or punches in this condition be sure to have them properly dressed before using—and prevent the loss of an eye.

Chisels or punches with “mushroomed” heads are a frequent cause of accident in the metal-working shops



said the foreman, "I think you had better take a week off and probably when you get back your hand will be in shape again." That week's lay-off not only changed John into a strict observer of the safety rules, but it inspired a healthy respect for them in all the other members of the force; and there has since been little occasion to penalize men in that plant for failure to attend to minor injuries.

A good example of how to discipline a man for breaking a rule is given by Mr. Morris, quoted earlier in this chapter.

"In a small town in Ohio," said Mr. Morris, "there came to work one day a man who was half shot—quite under the influence of liquor. He had just got his clothes changed when one of the *How One Man* safety committee reported that *Applied Discipline* Charley Steele was drunk. The superintendent went out into the shops, went up to him and said, 'Charley, you look awful sick; you better go home and rest up.' So Steele went home. When he came back to work next morning he was told to stop in and see the boss, so Steele went into the superintendent's office. The superintendent was sitting at his desk, and as Steele came in he got up and said, 'Steele, I am going to make you the superintendent of this plant for a few minutes. Sit down in my chair.' Steele sat

down in the chair and the superintendent went out and closed the door. A moment later he came in and said, 'Good morning, Mr. Superintendent. I came to work yesterday half drunk. I didn't realize that I might hurt myself, that I might endanger the other workmen, but I know you ought to do something to me. Now what are you going to do?' Steele thought pretty hard for a few minutes. Then he looked up and said that he ought to have thirty days. But the boss knew that Steele could not afford to take thirty days off, so he said, 'Charley, I am going to do better by you—two weeks. At the end of two weeks come back to see me.'

That happened three years ago, and Mr. Morris says that Charley Steele is now one of the best safety men in that plant.

Of course, a necessary first step in enforcing rules is making them known. It is not sufficient, generally, to post rules on the bulletin

board. The attention of the men should be called to them personally.

***Making the  
Rules Known***

Frequently it is advisable to get the men together and talk safety to them, man to man. This is especially important when new regulations are being put into effect or when a large number of new employees are being taken on at once. When a new man or woman is placed in your depart-

ment one of the first matters to be explained should be the code of safety rules. New men must be watched carefully to see that they take no unnecessary risks, and to make sure that they understand the precautions and safeguards provided. Women in particular must be carefully watched and instructed in the matter of "safety first."

If you are a natural organizer you will probably pick out a likely "safety man" to help you look after these things. Such a man, for example, can take over the instruction of new employees who move from one machine to another.

*Preventing Accidents in  
Your Own Department*

Either you, or the safety leader whom you appoint, must make it a rule to inspect every machine after it has been repaired to see that the guards have been replaced. Many serious accidents are caused by guards having been left off when the repair man has otherwise finished his job. If a new machine is set up in your department, do not allow it to be started until you or your safety man is sure that all the gears or the dangerous parts are protected. If a guard or safety device happens to be out of order, a sign should be put up until this has been remedied. The firm will never censure you for being too careful about these things.

Keep all passages and fire exits in your department clear and ready for action. Make sure that the waste materials and sweepings

*Plenty of Space  
and Light* are taken up from your department before leaving at night.

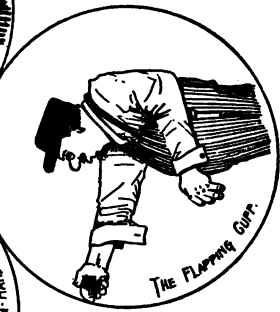
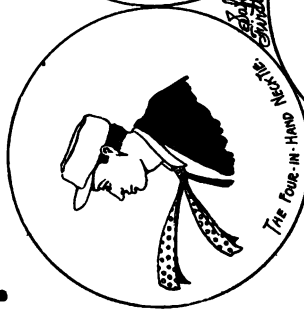
Gears, moving parts of machines, pulleys and clutches, belt bands and driving chains, fly-wheels, and starting balance wheels, shafting spindles and couplings, counter weights and balance weights, are some of the things for you to watch in making your department safe.

Good lighting plays an important part in helping make a safe department. This is especially true in dangerous places, such as the top of a dark stairway. Don't forget that lamps and reflectors when dirty lose as much as 50 per cent of their illuminating power. This is true also of windows. Keeping the windows and the shop-lighting fixtures clean is a large item in efficiency, not only in power but in safety.

A large number of accidents in the average plant is caused by falling articles. Never neglect to put out a sign when someone is working overhead—or, better still, rope off the area underneath, so that whatever falls will do no damage.

Make sure that platforms and scaffolds are provided with a back rail so that those using

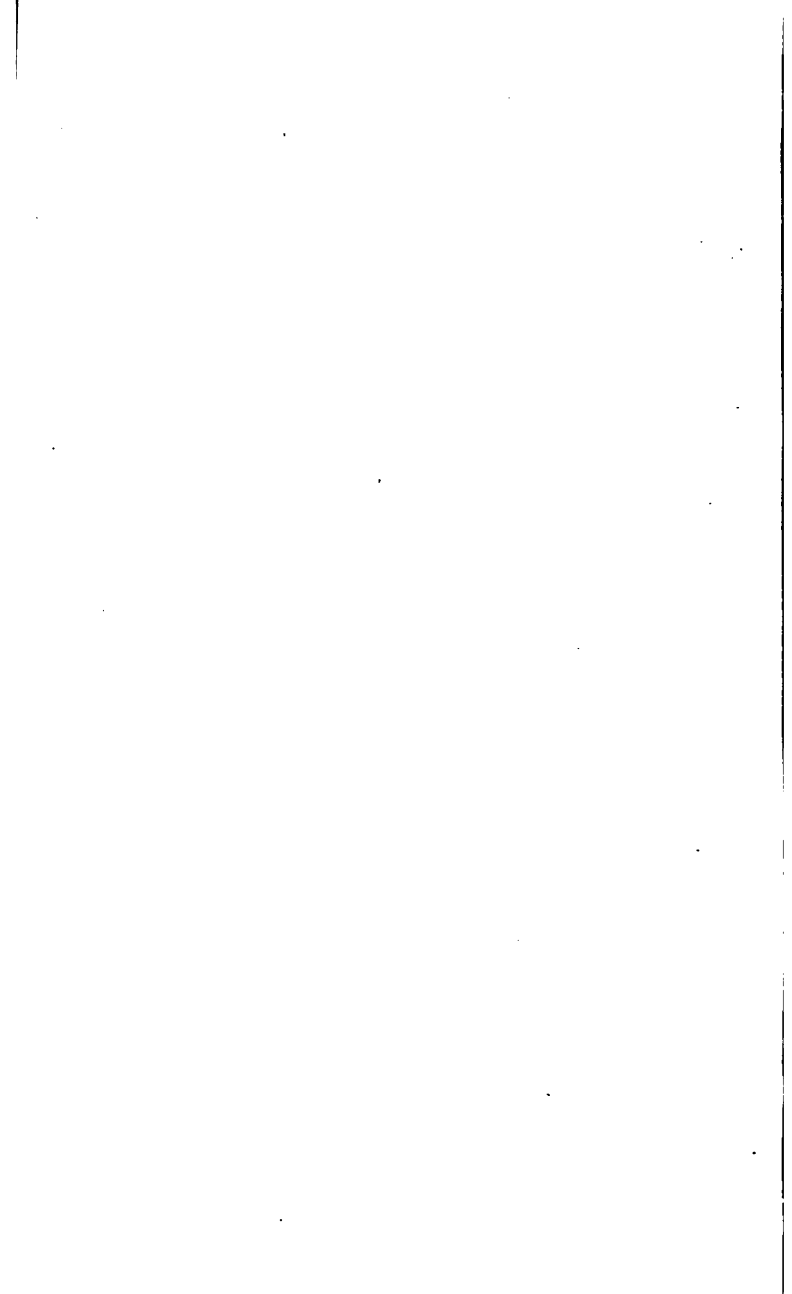
# DANGEROUS FOR MACHINISTS.



*Illustrations by  
J. M. Smith  
1918*

*American  
Sheet &  
Tin Plate  
Company  
U.S. Patent  
Office*

A safety-first poster of the American Sheet & Tin Plate Company which contains both a smile and an effective warning.





them will not step off into space and break their necks.

The most elaborate accident-prevention apparatus is of little use unless the desire is present in the minds of those using it to think "safety first." You will have to make repeated efforts to keep this idea up-  
*Make Your Men Think*

permost in the minds of your men. The tendency is to forget it after a bit. Make a note to call this matter to mind every two or three weeks and keep after the men persistently.

But don't let it all evaporate in talk. See that what you say is put into effect. Remember that accidents are most common when men do not think about what they are doing. Lots of people perform their work more or less automatically; while their fingers are busy earning their day's pay, their minds are roaming all over the country. Fewer accidents occur in small shops per men employed than in large ones. This is because men in the small shops, as a rule, are thinking more of what they are doing than those in larger ones.

Nine-tenths of the accidents are preventable and ninety-nine one-hundredths of these preventable ones could be avoided by a little thought. If you can get your men to think about what they are doing, you will not only make their work safer for them, but more in-

teresting to them and more profitable for you.

A good many accidents are caused by practical jokes, or so-called playfulness. Don't

## **BE CONSIDERATE**

### **Three Things Noticed Among Our Employees That Should Be Stopped**

Kidding a fellow worker because he reports a slight scratch and has it attended to properly. Fifteen per cent of compensational accidents in New York State during 1916 were due to small cuts and scratches that had become infected.

**OUR MEDICAL DEPARTMENT IS  
MAINTAINED FOR YOUR BENE-  
FIT. USE IT.**

Dampers of exhaust pipes in some departments have been closed for the purpose of letting the room fill with smoke. This is a poor joke.

**YOU WILL INJURE SOMEBODY  
AFFLICTED WITH WEAK LUNGS**

Throwing trays, crates and boxes on the floor. This unnecessarily raises a certain amount of dust which enters the lungs.

**NO HARM IS INTENDED, BUT IT  
MAY BE CAUSING SOMEONE UN-  
NECESSARY SUFFERING.**

A bulletin used by Eastman Kodak Company

allow any of this kind of horse-play in your department. Tell the fellows to

*No Horse-Play* wait until they get out where there is no machinery to cause accidents. One of these jokers caused a good man to lose his eye-

sight. The victim tripped over a rope when he was carrying a jar of strong acid. While the practical joker did not intend such a re-

In event of a fire immediately send in an alarm by operating the nearest fire-alarm box.

Telephone without delay to fire-headquarters and send in an alarm from an auxiliary box or the nearest city fire-alarm box.

When the alarm-apparatus sounds in the room the operatives must:

Stop work.

Shut off power.

Stop machines.

Shut off gas and other open flames.

Close doors and windows opening upon or under fire escapes.

Put chairs, tools, and other obstructions on top or under benches to clear the passageway.

Form line promptly with front of column facing the usual egress aisle and wait for the word of command from floor captain.

At the command to march, march in an orderly manner from the building, two abreast as instructed, not crowding upon the couple in front, and following the aisle leaders.

Preserve the interval in line between yourself and the couple in front of you.

Retain formation until dismissed, or until the line is returned to building.

Women always have the right of way.

Don't run.

Don't lag behind, breaking up columns.

Don't scream or make unnecessary noise.

Don't laugh or talk.

Don't cause confusion.

Don't remain in toilet or dressing rooms.

Don't return for your clothing.

Don't try to use elevators.

Don't attempt to leave the building except in accordance with fire drill regulations.

Don't fail to assist in carrying out instructions.

sult, nevertheless he was directly responsible for his victim's blindness. Don't let your men be taught by such a bitter experience. Playfulness is out of place in a shop.

The spirit of competition can be brought into the safety movement by getting everybody ambitious to have the best accident record in your department or in the whole plant. If your department is large enough you can get a little competition inside of it by organizing separate "safety gangs," pitting one against the other in the matter of accident records. Most companies will gladly donate a prize for a record of this kind. Such things help the spirit of competition.

Playing safe from the fire risk is a mighty important thing for you and your men. Fire destroys life and also a means of earning a living. As a rule, a fire puts a plant out of commission for some time. The best way to fight the fire risk, aside from having a clean department with no rubbish piled here and there, is to make sure that everybody knows just what to do the moment a fire occurs. Your plant management may already have arranged fire drills in which definite stations are given to various cool-headed employees. Each employee is instructed how to leave the building in the shortest possible time and with the least confusion. If there are no such arrangements

in your shop there is probably no reason why you should not get permission for a fire drill in your own department. It may set a good example to the rest of the shop.

The set of fire rules printed on page 123 are good rules to post in any shop. They make clear what is to be done when fire occurs.

You no doubt admire the man who jumps off a pier to save the life of some helpless person who has fallen into the water. As a department head in your shop you have an opportunity, by following the suggestions in this chapter, to become more effective in the saving of lives than any newspaper hero you ever heard of.

## X

### Helping Men to Think Straight

**L**EADERSHIP is either good or bad, according to the use to which it is put.

The power of leadership that you have acquired through your experiences, brains, and training can be made a strong influence toward helping those with whom you come into contact to think straight. One of your duties as a leader of workers will be to help them to think sanely about many difficult questions. We don't want a reign of Bolshevism in this country, with all its attendant crimes and miseries. One of the best ways to avoid such tendencies is to talk things over frankly and "on the level" when there is a good opportunity to do so.

This doesn't mean making yourself a curbstone debater. The real leader seldom does much arguing. It means simply getting your own ideas so clear and definite that in a few words you can point out what is right or wrong in the opinions expressed by your men. As a word of caution, be sure that anything you say on questions of capital and labor, and the like,

is perfectly fair and sincere. Otherwise it will have just the opposite effect from the one you intend.

Wrong thinking about the relationships of capital and labor, on both sides of the fence, has caused most of the labor difficulties, the strikes and lockouts, that have occurred during the last quarter century. Neither side has properly appreciated the fact that they are both traveling in the same wagon along the same road toward the same destination; and that if both of them push, the wagon will get there sooner than if they pull in opposite directions.

*Capital and Labor  
Are Partners*

It will be your duty, as a leader and a clear thinker, to point out the fact that only through their combined efforts can labor and capital make wealth. Nothing else can create it. They make it together solely through producing the largest possible amount of useful goods.

Wealth is not money, but what money will buy. No matter how much money a man may have, it would do him no good if there were nothing for sale. Suppose there were but one piece of bread and but one pair of shoes in the world and no more to be had. No matter how much money everybody had, all but one person would be barefoot and all but

*Wealth Comes Only  
from Production*

one would be without bread. In other words, it would not make a bit of difference under those circumstances whether you were paid 10 cents a day or a million dollars a day, unless there were *plenty of things to buy* with the money. It is the *production* of articles worth having, and not money in cash or in the bank, that makes real wealth for all of us. Money is nothing but a convenient means for buying and selling articles—passing them around from one person to another.

That is the reason why merely raising wages for everybody doesn't really do anybody any good. If shoes are scarce, raising wages doesn't make more of them. To be sure, if *you* happen to be the one whose wages are raised, you can buy an extra pair for yourself more easily; but your buying that pair makes shoes scarcer than ever, and up goes the price another notch. Then when it is time for you to buy another pair you have the same condition over again. Raising wages under such conditions is like putting a piece of court plaster on a boil. It hides the sore for a while, but doesn't cure it.

The only real cure is to make shoes so plentiful that their price will begin to come down, instead of climbing up so steadily. Shoes, of course, are merely an illustration of every manufactured article that we need and use.



The point is that it is useless to juggle prices and wages in the hope of making shoes or anything else easier to get, *The Cure for High Prices* and it is certainly no good to have capital and labor fighting each other to see which can be raised higher—wages or prices. The only thing worth doing is *to work together for more shoes, more clothes, more houses, more factories and railroads—for more everything that will give human beings more actual wealth.*

Production means wealth *for everybody.* As soon as you teach people that this is so, the trouble between capital and labor disappears into thin air.

Some of your men will raise the argument that an increased output of goods will help capital more than it will labor. Ask him in turn who finds it harder—the capitalist or the working man—to buy shoes at \$10 a pair?

Someone else may say that this is quite true, but that just as soon as shoes are plentiful, the wages of the shoemakers will be reduced. Show him that this will not hold true if the same number of shoemakers produce the increased number of shoes; for each man in that case will be increasing his output—and when a man produces more, no matter whether he is paid by the piece or by the day, he is bound to draw more pay.

Another of your men may say that as soon as the shoemakers have produced a large supply, the shoes will become a drug on the market, and one of two things will happen; either shoemakers will be laid off, or their wages will be cut.

*Preventing  
Unemployment*

Tell the man who says this that even when such is the case, it is due to over-competition and is not the fault of the manufacturers who suffer at least as great a loss as the men. And, as a matter of fact, there is no reason to think it will happen. For one thing, the war created a shortage of goods that it will take many years to overcome; it has made a labor shortage that will probably be felt for the next fifteen years; and under such conditions, goods are not turned out in large enough quantities to become a drug on the market. Tell him that the United States has recently increased its merchant marine on a vast scale, and that these ships mean foreign trade, new customers for American goods, new consumers of what we make and have to sell.

In discussing these things with your men, and getting them to think carefully about them, do not fail to throw a little light on the

*Figuring Costs  
and Profit*

subject of costs, which will be more fully presented in the fifth Unit of this Course. The average worker thinks of the cost of a job in terms of

the material and labor going into it. He does not figure at all on the overhead and indirect items, which are often many times more than the labor and material combined. Therefore, many workers make rough calculations something like this: "Let's see. I spent a day on that job, and Tom spent a day; that makes \$14. Then there were 100 pounds of castings at 8 cents a pound; that's \$8. Total cost, \$22; and the company sells it for \$45. How's that for making 100% profit? They could double our wages and still do very nicely."

If he were running the shop he would find that before a profit can be figured there are a few items to care for which he has overlooked. Out of that \$23 that remains after paying for labor and material must come so much for interest on the investment in the plant and its machinery; so much for power to run the machinery; so much for the superintendents, foremen and inspectors, the engineer and fireman, the night watchman, the elevator man, the yard man, the shop sweeper, the timekeeper, the salesman on the road, the bookkeepers, the cashier who puts up the pay envelopes, the credit man, the correspondents and the office boy; so much must come out of that \$23 for broken tools, for wear and tear on plant and equipment, for renewing leather belts and buying oil for bearings,

for buying files and emery cloth, for new bulbs for the shop lights, for mending the hole in the roof, for bad debts, for helping to pay interest on the mortgages, bonds and fixed indebtedness. All of these items which enter into "overhead" or "indirect" expense are lost sight of by the average workman; but what these items do to that supposed profit of \$23 is a plenty!

You have knowledge of these things and understand them; you look at such matters from a point of view entirely different from that of an untrained man. And it is your duty not only to the firm, but to the workers under you, to explain these things as best you can, so that they also will have a knowledge of the truth and can work more intelligently toward bettering themselves.

Try as much and as often as you can to overcome the idea that capital is exploiting labor. This idea is systematically spread by a lot of

*Workers Should Help  
to Save Capital*

unprincipled troublemakers who make a living by keeping the working man stirred up on this subject. They realize that the minute the worker sees the truth—that his interests as well as those of the company lie in bringing production up to as high a figure as possible—just as soon as the workers realize this, the trouble-makers will have to go out and earn

honest livings. The real exploitation of labor consists of misleading guidance by loud talkers and not in the fact that somebody has to save money and provide capital to build industrial plants if there are to be employment and wages and large-scale production.

Try to get them to see that the man who invests capital in a business must have a good return on his money or he would not invest it. If you cut down interest and profit, you make it just as desirable—in fact, more so—for the man with money to put it in a safe deposit vault where it will be safe, instead of turning it over to a manufacturing concern. Just as soon as you make it unprofitable for capital to invest in the extension of industries, you hit the worker. It is as much to the floor-sweeper's advantage to have his firm make a profit and enlarge its operations as it is to the advantage of the president of the company—in fact more so, for the president can perhaps find other opportunities, while the floor-sweeper's best chance to advance and make more money lies in having the firm take on more low-grade help.

Incidentally, if you can use your influence to have a worker save and invest in some good security, you will be showing yourself a real leader. You will transform that man into a

capitalist on a small scale, and he will quickly see many things in a new light.

Big production from each worker, higher wages, low cost of living, and a fair profit to the firm—these things spell prosperity for all concerned. They go hand in hand. It is impossible to have real prosperity unless you have all four of them.

Sometimes you hear the argument advanced that profits should be distributed among the workers instead of going to the investors.

*Distributing Profits  
Would Not Build  
Up Production*

Suppose it were done, how much of your share of these profits would go into building new plants for the employment of more workers? Every man who received the increase in wages through the division of these profits (and it would be a small increase at that) would spend this in his own way and forget all about the establishment of new industries.

You will have the job also of overcoming the feeling that labor-saving machinery hurts the working man. This is one of the hardest things to overcome, because on the face of it, when a machine is received in the shop, and one man can do ten men's work with it, nine men are out of a job.

The best way to answer this argument is

## Come In Out of The Rain!

Here is the way Dr. Frank Crane describes the present national situation

"The temptation now is to squander, with the rest of the crowd who are whirling along in a mad dance of extravagance. And, if you have sense and stamina enough to resist this temptation and lay by your extra earnings, you are going to enjoy yourself hugely some future day when many people will be out in the rain."

A tidy bank account will prove a rock of safety when the storm breaks.

Spend Reasonably — Save Regularly

NO. 107-1-1000

Eastman Kodak Company

## **KEEP THE NEW MAN FROM GETTING HURT**

1. Tip him off about carelessness.
2. Don't let him get "bit," unnecessarily, just because he's a new one.
3. If he's only a boy, take an interest in him. Your advice may save him from serious injury.

Thousands of men have learned the safety lesson by bitter experience.

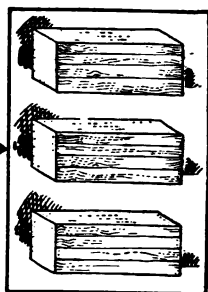
**GIVE THE NEW FELLOW  
THE BENEFIT OF YOURS!**

Eastman Kodak Company

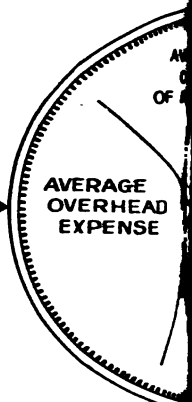
TWO GOOD BULLETINS THAT APPEAL TO THE RIGHT SIDE OF A MAN



The case of an ordinary group of workmen



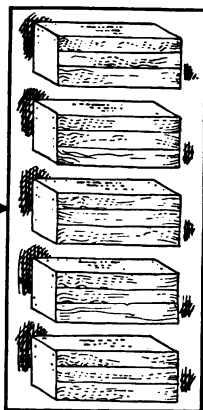
Turning out just average production but demanding increased wages



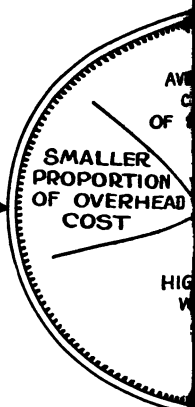
Results in a dividend paid by a customer shown above.



But when the same group of workmen



Buckle down to business and actually do the work they are capable of doing



The result is a customer's dollar that goes to both wage-earners

**THIS HITS EVERY ONE OF US—WORKER**  
The Worker is Not Only a Producer, but Also a





each dollar somewhat as

The consumer finds prices going up and up

And complains of the high cost of living.



of the customer more favorable and owner,

Yet at the same time the customer gets more for his money

And the cost of living is lowered for us all.

MANAGER, OWNER, AND CONSUMER ALIKE  
Consumer of His Own and Other People's Products



THE MAN WHO STICKS TO HIS JOB GETS THERE—THE FLOATER DRIFTS  
AND IS LOST

A Picture that Will Help to Reduce Labor Turnover—Reproduced from "American Industry," a Course of Reading and Lectures Designed Primarily for Workmen, Conducted by the Business Training Corporation

to go back in history to the time when all the weaving of cloth was done by hand. Along came Richard Arkwright with a spinning machine that would *Labor-saving Machinery Helps the Working Man* do the work of fifty men. What happened? The same old cry went up that 49 men out of 50 would be minus a job. Mobs burnt his shops and destroyed his machine and did their best to destroy the inventor also. But the machine came to stay, and all sorts of labor-saving machinery followed it, until one man could do the work of a thousand hand workers. Are there less men employed in making cloth and clothing today than there were one hundred years ago? No indeed, there are thousands of times more workers engaged at these industries now, in spite of all this labor-saving machinery, than there were then. The population of the world hasn't increased anywhere near in this proportion. What is the reason? Simply because every man has a shirt today and a suit of clothes and most people several shirts and two suits. Production increased, cost decreased, and everybody was happy. Ask your man if he would have us go back to making clothes by hand.

Let's take another example of a later date. Henry Ford turns out an automobile at a poor man's price. He pays about the highest wages

in his plant that are paid in the automobile business. He gets the maximum limit of production out of every man and machine in his plant, which is crammed full of labor-saving machinery. Everybody is happy. Ford is making a big profit and is happy; the men are drawing big pay and are happy; lots of people are riding in automobiles and are happy. Suppose we do away with this labor-saving machinery and go back to whittling automobiles out by hand. Who is able to buy them at the price that they would cost? Only a few rich people. Ford loses his market and the workers lose their jobs. Who gains by it?

Labor-saving machinery doesn't hurt labor; it is a godsend to it.

The workers of this country, and of any country, benefit more by the introduction of labor-saving machinery than do the capitalists. Who have benefited the most through the introduction of textile machinery? Thousands of capitalists, yes, but millions and millions of workers. The combined benefits of the workers would make the benefits of the capitalists look sick.

There is still another point on which it is your duty to lead the

*Standardized Wages*  
*Discourage Production*

thought of those under you. That is along the lines of the undesirability of standardizing wages—

in other words, lumping a certain class of workers into a hard-and-fast classification as "so-much-a-day men" regardless of their individual ability.

Just as soon as you do this, you kill all incentive to increase production, and just as soon as you do *this*—as we have seen in the early part of this chapter—you kill the goose that lays the golden egg.

If Tom Jones and Bill Smith are both classed as \$4 per day men, regardless of the fact that Tom can turn out twice the day's work that Bill can, the aforesaid Tom would be all kinds of a fool to do more than Bill does at \$4 per. By all right and reason Tom is worth \$8 per day, if Bill is worth \$4. In whose interest is the move to standardize wages? Not Tom's or any of the better and more skillful workers. It is an attempt on the part of the incapable to make the capable earn them a living wage. It is a dog-in-the-manger policy that says, because *I* am not worth more than \$4.00 per day, I won't let *you* be worth more than that.

Frequently the foreman can use the bulletin board to feature economic truths, lessons in thrift and industrial policies, as well as safety regulations. The pictures and bulletins printed on the inserts facing pages 134 and 135 are good examples of how this may be done.

Cartoons and other illustrations that have a telling point can frequently be clipped and brought to the men's attention. When the factory force is a large one the plant frequently finds it valuable to have special bulletins prepared and printed for posting on the bulletin boards.

Keep in mind to drive home, at each opportunity you get, this truth: that the owner, the manager, and the worker have one aim in common—to increase their mutual wealth through increasing their mutual efficiency and output.

## XI

### Helping Men to Make Good

**Y**OUR full duty—to your subordinates and to yourself—is not completed when you have brought the output of your department up to a satisfactory point. Beyond that, you should be using every means to help your men grow and make good.

If you examine carefully into the career of any man who is really successful, you will generally find his success founded upon his ability to select and develop others. Your success is bound to depend largely on what you make out of those who are working with and for you. There must be a community of interest between the boss and the men. One-sided relations never last long.

In some plants you have noticed an air of enthusiasm all through the place. Everyone from the president down to the messenger boy goes about his work as though he really enjoyed it. When you come across a plant of this kind you can put it down as an unmistakable success, and ten to one you will find that the reason for this

*Two Kinds  
of Shops*

success and enthusiasm is that those in control have a definite policy of looking out for the interests of the employees. This policy does not stop with the president or general manager but is followed out all down the line through the superintendent and foremen.

In contrast with this, you will find shops in which the wheels are apparently turning just as fast, but in which there is an entirely different air. The employees of the various departments have a manner of being on the watch for the boss, so that they can make a bluff at being busy when he comes. Foremen go about with cross faces on the lookout for trouble and intending to find it. As you pass the office of the superintendent you will hear him "calling down" one of the foremen who has met with his displeasure. A little later in the day, if you happen to be in the front office, you will hear this same superintendent having a heated argument with the manager.

In the second shop, where everybody is "on edge," you will find a large labor turnover as compared with the first shop where everybody is happy. You will find that people work harder and accomplish less. You will find that everyone from the foreman down to the least skilled employee watches the clock rather than the job. You will find, also, if



you look carefully into the matter, that the policy of looking out for the interests of subordinates is altogether lacking.

As the head of an industrial department, you hold perhaps the most important position which can be held in industry. You are the point of contact between the firm and the men *The Department Head's Responsibility* under you. The firm will be good or bad, in the minds of your men, according as you represent it well or poorly. And it is up to you to establish in your own department the right kind of working policy to breed enthusiasm and success. As a matter of good business, therefore, if not for any other reason, you must cultivate the habit of taking a real interest in those under you. This is a natural instinct in most cases; in others it will require cultivation. In any case it must be present, if you are to be a real success.

Show that you take a real interest in the work of each man in your department. If he does an especially good piece of work, or does it in especially good time, do not pass by his performance without comment, but take occasion to let him know that you are aware of it, and think well of him. For this purpose, be sure that all especially good time records are called to your attention as well as those which are especially bad. It does

not do to kick continually at shortcomings unless you also commend the praiseworthy accomplishments.

Make a practise of showing an interest in the earning ability of your men. Make them see that you want to help them earn more and advance themselves. As soon as

***Take an Interest  
in Your Men***

your men are convinced that you are anxious to see them succeed, you will have the 100 per cent loyalty of most of them. And it will be displayed not only while you are watching them, but while your back is turned as well. Behind-the-back loyalty is the kind that counts.

Take an interest in the home life of your men. If you hear that so-and-so has a sick wife, be sure to inquire how she is getting along. All men are human and such things cement them to you. The best part of practising this policy is the fact that gradually you will not have to force yourself to take this interest, for it will come naturally to you.

It is no doubt true that you have not much time for these things which come outside of actual shop activity, or are not connected directly with getting output; but nevertheless they are a part of your day's work and an important part. Your notebook should contain many items picked up from time to time concerning each of the men in your depart-

ment. It should contain such bits of information as that Jack Brown is paying for a home—that Tom Redding has a cripple daughter—that Bill Lebler has a boy whom he is putting through an engineering college. All of these items are human interest ammunition, which you will make of effective use in cultivating interest. As an army officer would phrase it, they help to sustain the *morale* of your department.

With the younger people in the department and the unskilled or partially trained, your endeavor should be to encourage their self-improvement through proper study.

If your plant maintains an educational department be sure to tell these people *Encourage Education* about the benefits they can obtain by applying themselves to it. If there is no course of instruction available at your plant, then perhaps there is some nearby trade school offering a course which will help them to make good. If so, you should know all about it. Get the young men to go to night school after hours, if you can, telling them that what they learn will help them toward success. If this Course in Production Methods is helping you, tell some of your best men about it so they can take it up right away.

If there is a baseball team or a bowling team in the department, encourage it and

show that you follow the results of the games, at least, even though you cannot be present at them.

All of these things are far outside of what the old school foreman considered to be his duties. But they are things that are necessary for a modern foreman to practise carefully if he desires to have a "smiling" department. And, other things being equal, a department of this kind cannot be beaten for output and efficiency.

Make it an ironclad rule not to let any man leave you with a feeling that you have been unjust. Let this rule apply even where a man has to be discharged. Explain to him fully and plainly the reasons for taking the steps, that you take. He may not believe you at the time, but later on when he cools off your actions in the matter will leave their impression on him and tend to make him a better man in the next job that he tackles.

Encourage your people to take a personal interest in their shop environment. Have them take pride in neatness, in the proper piling of stock and the absence of dirt or refuse under benches and in odd corners. It is peculiar how quickly a department or whole shop will become neat or slovenly according to the amount of interest displayed by the one

*Use Your Personal  
Influence*

in charge and conveyed to the workers through example.

Don't forget about the necessity of training your second man. Remember that the management cannot promote you to a higher job if so doing will cripple your present department. Lay your lines in such manner as to make your department self-sustaining in your absence. It requires good nerve and self-confidence to train a man to take your job; but it is a hundred times better to do it yourself than to have the company do it for you.

Don't get it into your head that leadership can be acquired by reading this text-book. You will have to practise in your daily life, day by day, with painstaking care, going back over the pages of this Unit time after time and studying each thought and idea until it becomes a part of you. You can get the essentials of organization, the cost methods, the production methods, and the like in much shorter time and with less effort than is required to acquire leadership and the art of handling men. Always remember the dignity of leadership and that your influence will be an important factor in promoting the prosperity or failure of everybody who works under your direction.

If you live up to your opportunities for constructive thinking and development—or

come anywhere near doing so—you will quickly make yourself a man marked for advancement to higher duties. "Responsibility gravitates to him who can shoulder it"—that is the basis and the law of all leadership.

## QUIZ QUESTIONS

### I

1. Why is it necessary that the foreman be a diplomat? Which of the ten essential qualities of the good production man is the outstanding quality of the diplomat?

2. In self-development what is meant by the "one-man-at-a-time" method?

3. What evidence have you of the fact that leadership can be acquired?

4. What is the difference in methods of handling men between the "driver" type of management and the "leader" type?

### II

5. Why is analysis important in managing men?

6. From what two points of view is the fitness of a worker to be considered?

7. What seven traits is it important to look for in sizing-up a worker?

8. What is a rating scale? How is it used?

9. What six traits must you use in sizing-up men?

### III

10. Why is self-confidence an essential element in control?

11. Explain the "experimental method" as applied to the cultivation of self-confidence.

12. Why is fear a bad trait in a leader or executive?

13. How may judgment and the habit of making quick decisions be developed?

14. What is meant by the "why habit"?

15. Give a good practical rule for cultivating tact.

16. How may you cultivate loyalty (*a*) in yourself? (*b*) in your fellow workmen?

17. Why is it important that the foreman be loyal to his gang as well as to the plant?

#### IV

18. Why is it a mistake in management to threaten to fire a workman?

19. How may a foreman cultivate the respect of his men? Is familiarity desirable?

20. What use may be made of self-respect and pride in handling men?

21. How may ambition be used to win cooperation?

22. How may the natural spirit of rivalry and competition be used to get better teamwork?

23. How can pride of workmanship frequently be used to overcome indifference and win a man to good working habits?

24. Why is the foreman who gets the reputation of "bluffing" invariably doomed to failure?

#### V

25. Why is it generally bad policy to fire an entire gang and hire a new one to take the vacancies?

26. Why is it frequently good policy to shift a workman who is not making good to a new kind of work?

27. In organizing profitless jobs for greater efficiency, what is the first step?

28. What is a job requirements list?

29. After analyzing the jobs, what is the next step in fitting men to these jobs?

30. How may splitting up a job into less difficult operations help in meeting a labor shortage?

31. Name three rules to be followed in giving an order.

32. Why should the foreman train a second man or assistant? Is this to the foreman's self-interest? Explain why it is or is not.



## VI

33. What incentive makes the chief appeal to the workman?

34. What is the difference between the daywork and the piecework systems of pay?

35. What is necessary to successful production under the daywork system?

36. Mention two disadvantages of the piecework system.

37. What is Manchester piecework?

38. Explain the Taylor differential piecework system. Contrast with it the premium system, and point out the difference between the two.

39. What is the Rowan premium plan? How does it differ from the premium system?

40. What is the task and bonus system?

41. What is the sliding scale system?

42. What is the "suggestion system" and how may it be used to the best advantage in stimulating work?

## VII

43. What are functional foremen? How do they differ from the old line foremen?

44. How may the foreman make use of the "exception" principle?

45. How may the foreman use "suggestion" in stimulating good work?

46. What is meant in the workshop by "smelling trouble"? Why is this faculty valuable in a foreman?

47. What method is recommended for handling the chronic grouches?

48. How may the foreman make use of the tactics of warfare in dealing most effectively with a group of men?

49. What policy is recommended for breaking up cliques?

50. Outline a good method for dealing with the man who has a "swelled head."

51. What methods are recommended for reducing absences?

## VIII

52. Explain how may a scarcity of skilled workers be neutralized or overcome by better organization of the individual jobs? Illustrate this method by recalling the case of the seaplane manufactory discussed in the chapter.

53. How is it true that his dependence upon skilled labor is a reflection upon the ability of a foreman or manager?

54. What is the difference between the skilled worker of the old type and that of the new?

55. Mention three steps that must be taken in order to adapt the work of a complex department to the capacity of untrained workers.

56. What is the chief difference between male and female help, from the factory standpoint?

57. What types of work are women best adapted to handle?

58. How do these factors enter into the problem of utilizing woman labor—attractiveness of workplace, fatigue, supervision, instruction, accident prevention?

59. What big point should be borne in mind in utilizing foreign labor?

## IX

60. What is the main responsibility of the foreman or other department head with respect to accident prevention and the safety movement?

61. What items other than the compensation of the injured worker enter into the cost of accidents?

62. Name three main lines of action that the foreman should follow in promoting safety in his department.

63. What should the foreman do as a preliminary to the enforcement of the safety rules in his department?

64. Why is it good to appoint one of the men in the department as "safety man"? What are the duties of such a man?

65. How is the safety principle involved in the following: (a) the lighting of the workroom, (b) space

around machines, (c) waste and sweepings, (d) exposed gears, driving chains, belts, flywheels, (e) platforms and scaffolds, (f) overhead workers?

66. How many horseplay and practical jokes endanger the safety of workers?

67. How may the spirit of competition be used to advance the safety movement?

68. What precautions against fire are within the control of the foreman?

## X

69. Why is it a duty of the foreman to help his men to think straight on economic questions?

70. How is it true that capital and labor are partners?

71. Explain the statement that wealth comes only from production.

72. Would a general raise of wages for all workmen in all industries be of advantage to any of them? Explain.

73. What is the only real cure for high prices?

74. What enters into the cost of producing an article other than the cost of its raw material and the labor spent upon processing that raw material?

75. Why is capital essential to production? Why is it to the interest of the employee that the firm earn a profit?

76. How does labor-saving machinery help the working man?

77. Why are standardized wages a handicap to high production? How do they affect the efficient worker?

## XI

78. Why should the foreman or department head take a personal interest in the workers under him?

79. Why should he show an interest in each man's earning capacity? In his home life and other matters outside shop activities?

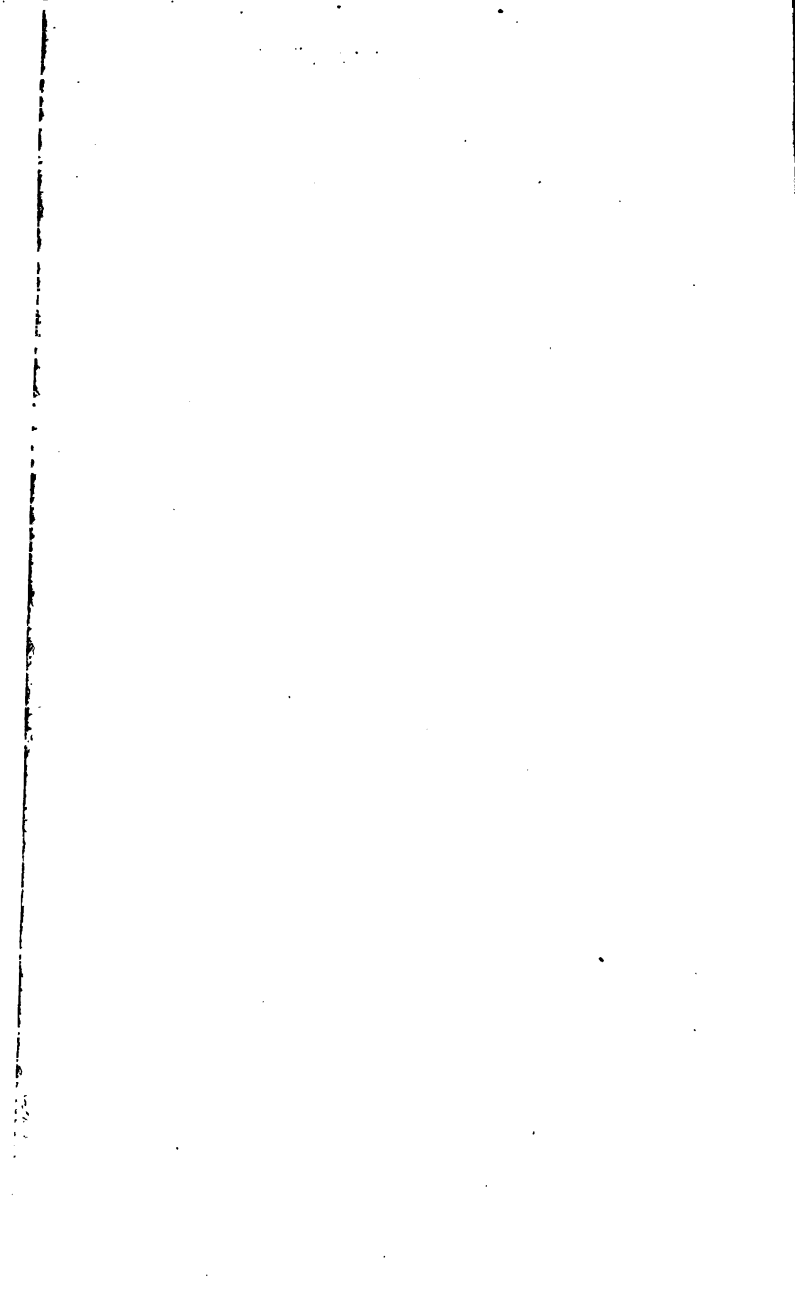
80. What is *morale* and how does a personal-interest policy help to sustain it?

81. What should be the personal attitude of the foreman toward the younger people of his department, and the unskilled or partially trained?

82. Why is it important never to let a man leave your employment with a feeling that he has been unfairly treated?

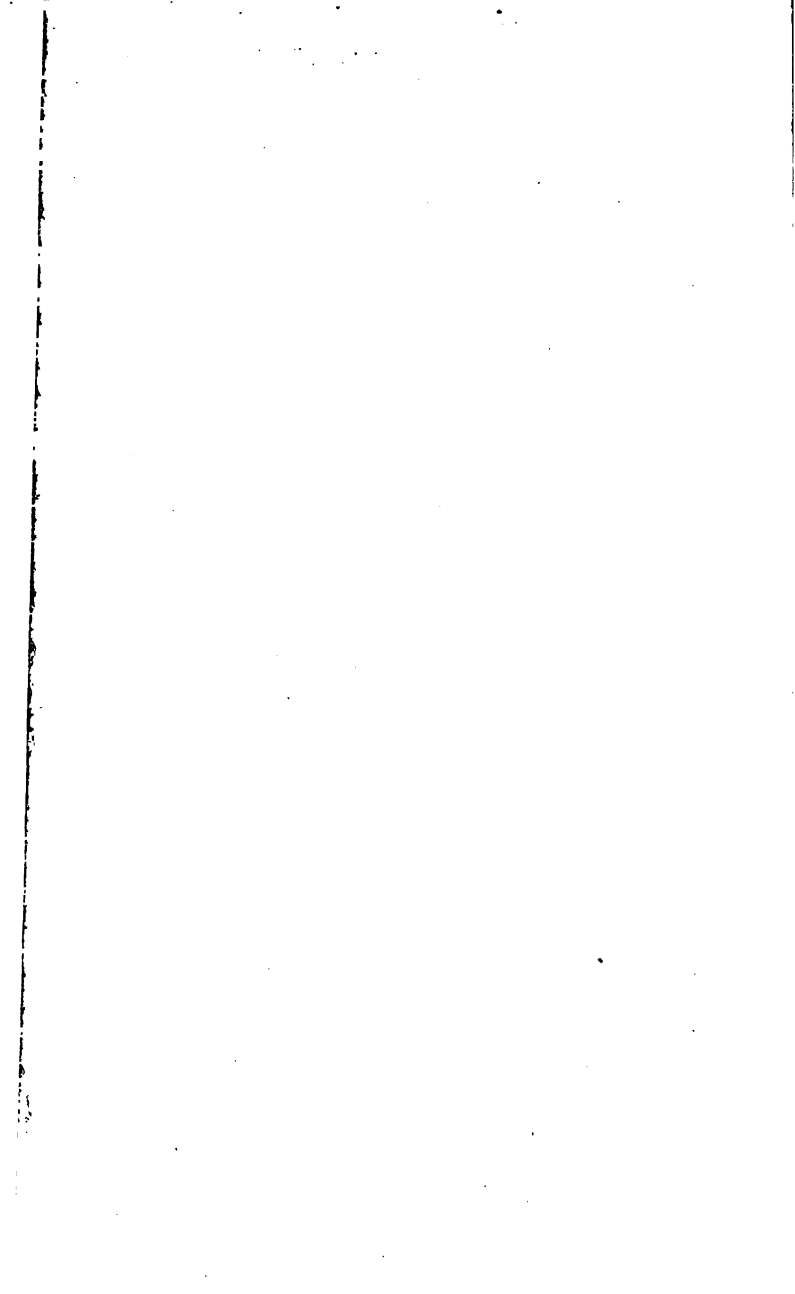












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